ESSAYS

AND

TREATISES

ON

SEVERAL SUBJECTS.

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VOL. II.

CONTAINING

Philosophical ESSAYS concerning HUMAN UNDERSTANDING.

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ESSAY I.

Of the different Species of PHILOSOPHY.

MORAL philosophy, or the science of human nature, may be treated after two different manners; each of which has its peculiar merit, and may contribute to the entertainment, instruction, and reformation of mankind. The one considers man chiefly as born for action; and as influenc'd in his actions by taste and sentiment; pursuing one object, and avoiding another, according to the value, which these objects seem to possess, and according to the light, in which they present themselves. Virtue, of all objects, is the most valuable and lovely; and accordingly this species of philosophers paint her in the most amiable colours, borrowing all helps from poetry and eloquence, and treating their subject in an easy and obvious manner, such as is best fitted to please the imagination, and engage the affections. They select the

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moſt ſtriking obſervations and inſtances from common life; place oppoſite characters in a proper contraſt; and alluring us into the paths of virtue, by the views of glory and happineſs, direct our ſteps in theſe paths, by the ſoundeſt precepts and moſt illuſtrious examples. They make us *feel* the difference betwixt vice and virtue; they excite and regulate our ſentiments; and ſo they can but bend our hearts to the love of probity and true honour, they think, that they have fully attained the end of all their labours.

The other ſpecies of philoſophers treat man rather as a reaſonable than an active being, and endeavour to form his underſtanding more than cultivate his manners. They regard mankind as a ſubject of ſpeculation; and with a narrow ſcrutiny examine human nature, in order to find thoſe principles, which regulate our underſtandings, excite our ſentiments, and make us approve or blame any particular object, action, or behaviour. They think it a reproach to all literature, that philoſophy ſhould not yet have fixt, beyond controverſy, the foundation of morals, reaſoning, and criticiſm; and ſhould for ever talk of truth and falſhood, vice and virtue, beauty and deformity, without being able to determine the ſource of theſe diſtinctions. While they *attempt* this arduous taſk, they are deter'd by no diſſi-

difficulties; but proceeding from particular instances to general principles, they still push on their enquiries to principles more general, and rest not satisfy'd till they arrive at those original principles, by which, in every science, all human curiosity must be bounded. Tho' their speculations seem abstract and even unintelligible to common readers, they please themselves with the approbation of the learned and the wise; and think themselves sufficiently compensated for the labours of their whole lives, if they can discover some hidden truths, which may contribute to the instruction of posterity.

'TIS certain, that the easy and obvious philosophy will always, with the generality of mankind, have the preference to the accurate and abstruse; and by many will be recommended, not only as more agreeable, but more useful than the other. It enters more into common life; moulds the heart and affections; and, by touching those principles, which actuate men, reforms their conduct, and brings them nearer that model of perfection, which it describes. On the contrary, the abstruse philosophy, being founded on a turn of mind, which cannot enter into business and action, vanishes when the philosopher leaves the shade and comes into open day; nor can its precepts and principles easily retain any influence over our conduct and behaviour. The feelings of our sentiments,

the agitations of our paſſions, the vehemence of affections, diſſipate all its concluſions, and rec the profound philoſopher to a mere plebeian.

THIS alſo muſt be confeſs'd, that the moſt dura as well as juſteſt fame has been acquir'd by the philoſophy, and that abſtract reaſoners ſeem hith to have enjoy'd only a momentary reputation, f the caprice or ignorance of their own age, but h not been able to ſupport their renown with n equitable poſterity. 'Tis eaſy for a profound ph ſopher to commit a miſtake in his ſubtile reaſonin and one miſtake is the neceſſary parent of anot while he puſhes on his conſequences; and is not ter'd from embracing any concluſion, by its unu appearance, or its contradiction to popular opin But a philoſopher, who propoſes only to repreſent common ſenſe of mankind in more beautiful more engaging colours, if by accident he commi miſtake, goes no farther; but renewing his ap to common ſenſe, and the natural ſentiments of mind, returns into the right path, and ſecures h ſelf from any dangerous illuſions. The fame *Cicero* flouriſhes at preſent; but that of *Ariſtotle* is terly decay'd. *La Bruyere* paſſes the ſeas, and maintains his reputation: But the glory of *M branche* is confin'd to his own nation and to his

age. And *Addiſon*, perhaps, will be read with pleaſure, when *Locke* ſhall be entirely forgotten.

THE mere philoſopher is a character which is commonly but little acceptable in the world, as being ſuppos'd to contribute nothing either to the advantage or pleaſure of ſociety; while he lives remote from communication with mankind, and is wrapt up in principles and notions equally remote from their comprehenſion. On the other hand, the mere ignorant is ſtill more deſpis'd; nor is any thing eſteem'd a ſurer ſign of an illiberal genius, in an age and nation where the ſciences flouriſh, than to be entirely void of all taſte and reliſh for thoſe noble entertainments. The moſt perfect character is ſuppos'd to lie betwixt thoſe extremes; retaining an equal ability and taſte for books, company, and buſineſs; preſerving in converſation that diſcernment and delicacy which ariſe from polite letters; and in buſineſs, that probity and accuracy which are the natural reſult of a juſt philoſophy. In order to diffuſe and cultivate ſo accompliſh'd a character, nothing can be more uſeful than compoſitions of the eaſy ſtyle and manner, which draw not too much from life require no deep application or retreat to be comprehended, and ſend back the ſtudent among mankind full of noble ſentiments and wiſe precepts, applicable to every emergence of human life. By means

of ſuch compoſitions, virtue becomes amiable, ſcience agreeable, company inſtructive, and retirement entertaining.

MAN is a reaſonable being; and as ſuch, receives from ſcience his proper food and nouriſhment: But ſo narrow are the bounds of human underſtanding, that little ſatisfaction can be hop'd for in this particular, either from the extent or ſecurity of his acquiſitions. Man is a ſociable, no leſs than a reaſonable being: But neither can he always enjoy company agreeable and amuſing, or preſerve the proper reliſh of them. Man is alſo an active being; and from that diſpoſition, as well as from the various neceſſities of human life, muſt ſubmit to buſineſs and occupation: But the mind requires ſome relaxation, and cannot always ſupport its bent to care and induſtry. It ſeems, then, that nature has pointed out a mixt kind of life as moſt ſuitable to human race, and ſecretly admoniſh'd them to allow none of theſe biaſſes to *draw* too much, ſo as to incapacitate them for other occupations and entertainments. Indulge your paſſion for ſcience, ſays ſhe, but let your ſcience be human, and ſuch as may have a direct reference to action and ſociety. Abſtruſe thought and profound reſearches I prohibit, and will ſeverely puniſh, by the penſive melancholy which they introduce, by the endleſs uncertainty in which they involve you,

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and by the cold reception which your pretended discoveries will meet with, when communicated. Be a philosopher; but, amidst all your philosophy, be still a man.

WERE the generality of mankind contented to prefer the easy philosophy to the abstract and profound, without throwing any blame or contempt on the latter, it might not be improper, perhaps, to comply with this general opinion, and allow every man to enjoy, without opposition, his own taste and sentiment. But as the matter is often carry'd farther, even to the absolute rejecting all profound reasonings or what is commonly call'd *metaphysics*, we shall now proceed to consider what can reasonably be pleaded in their behalf.

WE may begin with observing, that one considerable advantage which results from the accurate and abstract philosophy, is, its subserviency to the easy and humane; which, without the former, can never attain a sufficient degree of exactness in its sentiments, precepts, or reasonings. All polite letters are nothing but pictures of human life in various attitudes and situations; and inspire us with different sentiments of praise or blame, admiration or ridicule, according to the qualities of the object which they set before us. An artist must be better qualify'd to suc-

ceed in this undertaking, who, beſides a delicate taſte and a quick apprehenſion, poſſeſſes an accurate knowledge of the internal fabric, the operations of the underſtanding, the workings of the paſſions, and the various ſpecies of ſentiment, which diſcriminate vice and virtue. However painful this inward ſearch or enquiry may appear, it becomes, in ſome meaſure, requiſite to thoſe, who would deſcribe with ſucceſs the obvious and outward appearances of life and manners. The anatomiſt preſents to the eye the moſt hideous and diſagreeable objects; but his ſcience is highly uſeful to the painter in delineating even a *Venus* or an *Helen*. While the latter employs all the richeſt colours of his art, and gives his figures the moſt graceful and engaging airs; he muſt ſtill carry his attention to the inward ſtructure of the human body, the poſition of the muſcles, the fabric of the bones, and the uſe and figure of every part or organ. Accuracy is, in every caſe, advantageous to beauty, and juſt reaſoning to delicate ſentiments. In vain would we exalt the one, by depreciating the other.

Besides, we may obſerve, in every art or profeſſion, even thoſe which moſt concern life or action, that a ſpirit of accuracy, however acquir'd, carries all of them nearer their perfection, and renders them more ſubſervient to the intereſts of ſociety. And

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tho' a philoſopher may live remote from buſineſs and employment, the genius of philoſophy, if carefully cultivated by ſeveral, muſt gradually diffuſe itſelf thro' the whole ſociety, and beſtow a ſimilar correctneſs on every art and calling. The politician will acquire greater foreſight and ſubtilty, in the ſubdividing and ballancing of power; the lawyer more method and finer principles in his reaſonings; and the general more regularity in his diſcipline, and more caution in his plans and operation. The ſtability of modern governments above the antient, and the accuracy of modern philoſophy, have improv'd, and probably will ſtill improve, by ſimilar gradations.

WERE there no advantage to be reap'd from theſe ſtudies beyond the gratification of an innocent curioſity, yet ought not even this to be deſpis'd; as being one acceſſion to thoſe few ſafe and harmleſs pleaſures which are beſtow'd on human race. The ſweeteſt and moſt inoffenſive path of life leads thro' the avenues of ſcience and learning; and whoever can either remove any obſtructions in this way, or open up any new proſpect, ought ſo far to be eſteem'd a benefactor to mankind. And tho' theſe reſearches may appear painful and fatiguing, 'tis with ſome minds as with ſome bodies, which, being endowed with vigorous and florid health, require ſevere exerciſe, and reap a pleaſure from what, to the generality of mankind,

kind, may ſeem burthenſome and laborious. Obſcurity, indeed, is painful to the mind as well as to the eye; but to bring light from obſcurity, by whatever labour, muſt needs be delightful and rejoicing.

But this obſcurity, in the profound and abſtract philoſophy, is objected to, not only as painful and diſagreeable, but as the inevitable ſource of uncertainty and error. Here indeed lies the juſteſt and moſt plauſible objection againſt a conſiderable part of metaphyſics, that they are not properly a ſcience, but ariſe either from the fruitleſs efforts of human vanity, which would penetrate into ſubjects utterly inacceſſible to the underſtanding, or from the craft of popular ſuperſtitions, which, being unable to defend themſelves on fair ground, raiſe theſe intangling brambles to cover and protect their weakneſs. Chac'd from the open country, theſe robbers fly into the foreſt, and lie in wait to break in upon every unguarded avenue of the mind, and overwhelm it with religious fears and prejudices. The ſtouteſt antagoniſt, if he remits his watch a moment, is oppreſt. And many, thro' cowardice and folly, open the gates to the enemies, and willingly receive them with reverence and ſubmiſſion, as their legal ſovereigns.

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BUT is this a juſt cauſe why philoſophers ſhould deſiſt from ſuch reſearches, and leave ſuperſtition ſtill in poſſeſſion of her retreat? Is it not reaſonable to draw a direct contrary concluſion, and perceive the neceſſity of carrying the war into the moſt ſecret receſſes of the enemy? In vain do we hope, that men, from frequent diſappointments, will at laſt abandon ſuch airy ſciences, and diſcover the proper province of human reaſon. For beſides, that many perſons find too ſenſible an intereſt in perpetually recalling ſuch topics; beſides this, I ſay, the motive of blind deſpair can never reaſonably have place in the ſciences; ſince, however unſucceſsful former attempts may have prov'd, there is ſtill room to hope, that the induſtry, good-fortune, or improv'd ſagacity of ſucceeding generations may reach diſcoveries unknown to former ages. Each adventurous genius will ſtill leap at the arduous prize, and find himſelf ſtimulated, rather than diſcourag'd, by the failures of his predeceſſors; while he hopes, that the glory of atchieving ſo hard an adventure is reſerved for him alone. The only method of freeing learning, at once, from theſe abſtruſe queſtions, is to enquire ſeriouſly into the nature of human underſtanding, and ſhew, from an exact analyſis of its powers and capacity, that it is, by no means, fitted for ſuch remote and abſtruſe ſubjects. We muſt ſubmit to this fatigue, in order to live at eaſe ever after: And muſt cal-

cultivate true metayhyſics with ſome care, in order to deſtroy the falſe and adulterate. Indolence, which, to ſome perſons, affords a ſafeguard againſt this deceitful philoſophy, is, with others, over-ballanc'd by curioſity; and deſpair, which, at ſome moments, prevails, may give place afterwards to ſanguine hopes and expectations. Accurate and juſt reaſoning is the only catholic remedy, fitted for all perſons and all diſpoſitions, and is alone able to ſubvert that abſtruſe philoſophy and metaphyſical jargon, which, being mixt up with popular ſuperſtition, renders it, in a manner, impenetrable to careleſs reaſoners, and gives it the air of ſcience and wiſdom.

Besides this advantage of rejecting, after deliberate enquiry, the moſt uncertain and diſagreeable part of learning, there are many poſitive advantages, which reſult from an accurate ſcrutiny into the powers and faculties of human nature. 'Tis remarkable concerning the operations of the mind, that tho' moſt intimately preſent to us, yet whenever they become the object of reflection, they ſeem involv'd in obſcurity, nor can the eye readily find thoſe lines and boundaries, which diſcriminate and diſtinguiſh them. The objects are too fine to remain long in the ſame aſpect or ſituation; and muſt be apprehended, in an inſtant, by a ſuperior ſubtilty and penetration, deriv'd from nature, and improv'd by habit and reflection. It becomes,

therefore,

therefore, no inconſiderable part of ſcience barely to know the different operations of the mind, to ſeparate them from each other, to claſs them under their proper diviſions, and to correct all that ſeeming diſorder, in which they lie involv'd, when made the object of reflection and enquiry. This taſk of ordering and diſtinguiſhing, which has no merit, when perform'd with regard to external bodies, the objects of our ſenſes, riſes in its value, when directed towards the operations of the mind, in proportion to the difficulty and labour, which we meet with in performing it. And if we can go no farther than this mental geography or delineation of the diſtinct parts and powers of the mind, 'tis at leaſt a ſatisfaction to go ſo far; and the more contemptible this ſcience may appear (and it is by no means contemptible) the more contemptible ſtill muſt the ignorance of it appear, in all pretenders to learning and philoſophy.

NOR can there remain any ſuſpicion, that this ſcience is uncertain and chimerical; unleſs we ſhould entertain ſuch a ſcepticiſm as is entirely ſubverſive of all ſpeculation, and even action. It cannot be doubted, that the mind is endow'd with ſeveral powers and faculties, that theſe powers are totally diſtinct from each other, that what is really diſtinct to the immediate perception may be diſtinguiſh'd by reflection; and conſequently, that there is a truth and falſhood

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in all propofitions on this fubject, and a truth and falfhood, which lies not beyond the compafs of human underftanding. There are many obvious diftinctions of this kind, fuch as thofe betwixt the will and underftanding, the imagination and paffions, which fall within the comprehenfion of every human creature; and the finer and more philofophical diftinctions are no lefs real and certain, tho' more difficult to be comprehended. Some inftances, efpecially late ones, of fuccefs in thefe enquiries, may give us a jufter notion of the certainty and folidity of this branch of learning. And fhall we efteem it worthy the labour of a philofopher to give us a true fyftem of the planets, and adjuft the pofition and order of thofe remote bodies; while we affect to overlook thofe, who, with fo much fuccefs, delineate and defcribe the parts of the mind, in which we are fo intimately concern'd?

But may we not hope, that philofophy, if cultivated with care, and encourag'd by the attention of the public, may carry its refearches ftill farther, and difcover, at leaft in fome degree, the fecret fprings and principles, by which the human mind is actuated it is operations? Aftronomers had long contented themfelves with proving, from the phænomena, the true motions, order, and magnitude of the heavenly bodies: Till a philofopher, at laft, arofe, who feems,

from the happieſt reaſoning, to have alſo determin'd the laws and forces, by which the revolutions of the planets are govern'd and directed. The like has been perform'd with regard to other parts of nature. And there is no reaſon to deſpair of equal ſucceſs in our enquiries concerning the mental powers and oeconomy, if proſecuted with equal capacity and caution. 'Tis probable, that one operation and principle of the mind depends on another; which, again, may be reſolv'd into one more general and univerſal: And how far theſe reſearches may poſſibly be carry'd, 'twill be difficult for us, before, or even after, a careful trial, exactly to determine. This is certain, that attempts of this kind are every day made even by thoſe who philoſophize the moſt negligently; and nothing can be more requiſite than to enter upon the enterprize with thorough care and attention; that, if it lie within the compaſs of human underſtanding, it may at laſt be happily atchiev'd; if not, it may, however, be rejected with ſome confidence and ſecurity. This laſt concluſion, ſurely, is not deſirable, nor ought it to be embrac'd too raſhly. For how much muſt we diminiſh from the beauty and value of this ſpecies of philoſophy, upon ſuch a ſuppoſition? Moraliſts have hitherto been accuſtom'd, when they conſider'd the vaſt multitude and diverſity of actions that excite our approbation or diſlike, to ſearch for ſome common principle, on which this variety

riety of ſentiments might depend. And tho' they have ſometimes carry'd the matter too far, by their paſſion for ſome one general principle; it muſt, however, be confeſt, that they are excuſable, in expecting to find ſome general principles, into which all the vices and virtues were juſtly to be reſolv'd. The like has been the endeavour of critics, logicians, and even politicians: Nor have their attempts been altogether unſucceſsful; tho' perhaps longer time, greater accuracy, and more ardent application may bring theſe ſciences ſtill nearer their perfection. To throw up at once all pretenſions of this kind may juſtly be eſteem'd more raſh, precipitate, and dogmatical, than even the boldeſt and moſt affirmative philoſophy, which has ever attempted to impoſe its crude dictates and principles on mankind.

What tho' theſe reaſonings concerning human nature ſeem abſtract, and of difficult comprehenſion? This affords no preſumption of their falſhood. On the contrary, it ſeems impoſſible, that what has hitherto eſcap'd ſo many wiſe and profound philoſophers can be very obvious and eaſy. And whatever pains theſe reſearches may coſt us, we may think ourſelves ſufficiently rewarded, not only in point of profit but of pleaſure, if, by that means, we can make any addition to our ſtock of knowlege, in ſubjects of ſuch unſpeakable importance.

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BUT as, after all, the abstractness of these speculations is no recommendation, but rather a disadvantage to them, and as this difficulty may perhaps be surmounted by care and art, and the avoiding all unnecessary detail, we have, in the following essays, attempted to throw some light upon subjects, from which uncertainty has hitherto deterr'd the wise, and obscurity the ignorant. Happy, if we can mine the boundaries of the different species of philosophy, by reconciling profound enquiry with clearness, and truth with novelty! And still more happy, if, reasoning in this easy manner, we can undermine the foundations of an abstruse philosophy, which seems to have serv'd hitherto only as a shelter to superstition and a cover to absurdity and error!

ESSAY

ESSAY II.

Of the ORIGIN *of* IDEAS.

EVERY one will readily allow, that there is a conſiderable difference betwixt the perceptions of the mind, when a man feels the pain of exceſſive heat, or the pleaſure of moderate warmth, and when he afterwards recalls to his memory this ſenſation, or anticipates it by his imagination. Theſe faculties may mimic or copy the perceptions of the ſenſes; but they never can reach entirely the force and vivacity of the original ſentiment. The utmoſt we ſay of them, even when they operate with greateſt vigour, is, that they repreſent their object in ſo lively a manner, that we could *almoſt* ſay we feel or ſee it: But except the mind be diſorder'd by diſeaſe or madneſs, they never can arrive at ſuch a pitch of vivacity as to render theſe perceptions altogether undiſtinguiſhable. All the colours of poetry, however ſplendid, can never paint natural objects in ſuch a manner as to make the deſcription to be taken for a real landſkip. The

moſt lively thought is ſtill inferior to the dulleſt ſenſation.

We may obſerve a like diſtinction to run thro' all the other perceptions of the mind. A man, in a fit of anger, is actuated in a very different manner from one who only thinks of that emotion. If you tell me, that any perſon is in love, I eaſily underſtand your meaning, and form a juſt conception of his ſituation; but never can miſtake that conception for the real diſorders and agitations of the paſſion. When we reflect on our paſt ſentiments and affections, our thought is a faithful mirror, and copies its objects truly; but the colours it employs are faint and dull, in compariſon of thoſe in which our original perceptions were cloth'd. It requires no nice diſcernment nor metaphyſical head to mark the diſtinction betwixt them.

Here therefore we may divide all the perceptions of the mind into two claſſes or ſpecies, which are diſtinguiſh'd by their different degrees of force and vivacity. The leſs forcible and lively are commonly denominated Thoughts or Ideas. The other ſpecies want a name in our language, and in moſt others; I ſuppoſe, becauſe it was not requiſite for any, but philoſophical purpoſes, to rank them under a general term or appellation. Let us, therefore, uſe a little freedom, and call them Impressions, employing

ing that word in a ſenſe ſomewhat different from the uſual. By the term *impreſſion*, then, we mean all our more lively perceptions, when we hear, or ſee, or feel, or love, or hate, or deſire, or will. And impreſſions are diſtinguiſh'd from ideas, which are the leſs lively perceptions of which we are conſcious, when we reflect on any of thoſe ſenſations or movements above mention'd.

NOTHING, at firſt view, may ſeem more unbounded than the thought of man, which not only eſcapes all human power and authority, but is not even reſtrain'd within the limits of nature and reality. To form monſters, and join incongruous ſhapes and appearances, coſts it no more trouble than to conceive the moſt natural and familiar objects. And while the body is confin'd to one planet, along which it creeps with pain and difficulty; the thought can in an inſtant tranſport us into the moſt diſtant regions of the univerſe; or even beyond the univerſe, into the unbounded chaos, where nature is ſuppos'd to lie in total confuſion. What never was ſeen, nor heard of, may yet be conceiv'd; nor is any thing beyond the power of thought, except what implies an abſolute contradiction.

BUT tho' thought ſeems to poſſeſs this unbounded liberty, we ſhall find, upon a nearer examination, that it is really confined within very narrow limits,

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and that all this creative power of the mind amounts to no more than the compounding, tranſpoſing, augmenting, or diminiſhing the materials afforded us by the ſenſes and experience. When we think of a golden mountain, we only join two conſiſtent ideas, *gold*, and *mountain*, with which we were formerly acquainted. A virtuous horſe we can conceive; becauſe, from our own feeling, we can conceive virtue, and this we may unite to the figure and ſhape of a horſe, which is an animal familiar to us. In ſhort all the materials of thinking are deriv'd either from our outward or inward ſentiment: The mixture and compoſition of theſe belongs alone to the mind and will. Or, to expreſs myſelf in philoſophical language, all our ideas or more feeble perceptions are copies of our impreſſions or more lively ones.

To prove this, the two following arguments will, I hope, be ſufficient. Firſt, When we analyſe our thoughts or ideas, however compounded or ſublime, we always find, that they reſolve themſelves into ſuch ſimple ideas as were copy'd from a precedent feeling or ſentiment. Even thoſe ideas, which, at firſt view, ſeem the moſt wide of this origin, are found, upon a narrower ſcrutiny, to be deriv'd from it. The idea of God, as meaning an infinitely intelligent, wiſe, and good Being, ariſes from reflecting on the operations of our own mind, and augmenting, without limit,

mit, those qualities of goodness and wisdom. We may prosecute this enquiry to what length we please; where we shall always find, that every idea we examine is copy'd from a similar impression. Those who would assert, that this position is not absolutely universal and without exception, have only one, and that an easy method of refuting it, by producing that idea, which, in their opinion, is not deriv'd from this source. It will then be incumbent on us, if we would maintain our doctrine, to produce the impression or lively perception, which corresponds to it.

SECONDLY. If it happen, from a defect of the organ, that a man is not susceptible of any species of sensation, we always find, that he is as little susceptible of the correspondent ideas. A blind man can form no notion of colours; a deaf man of sounds. Restore either of them that sense, in which he is deficient; by opening this new inlet for his sensations, you also open an inlet for the ideas, and he finds no difficulty of conceiving these objects. The case is the same, if the object, proper for exciting any sensation, has never been applied to the organ. A *Laplander* or *Negro* has no notion of the relish of wine And tho' there are few or no instances of a like deficiency in the mind, where a person has never felt or is altogether incapable of a sentiment or passion, that belongs to his species; yet we find the same observa-

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tion to take place in a leſſer degree. A man of mild manners can form no notion of inveterate revenge or cruelty; nor can a ſelfiſh heart eaſily conceive the heights of friendſhip and generoſity. 'Tis readily allow'd, that other beings may poſſeſs many ſenſes, of which we can have no conception; becauſe the ideas of them have never been introduc'd to us in the only manner by which an idea can have acceſs to the mind, *viz.* by the actual feeling and ſenſation.

THERE is, however, one contradictory phænomenon, which may prove, that 'tis not abſolutely impoſſible for ideas to go before their correſpondent impreſſions. I believe it will readily be allow'd, that the ſeveral diſtinct ideas of colours, which enter by the eyes, or thoſe of ſounds, which are convey'd by the hearing, are really different from each other; tho', at the ſame time, reſembling. Now if this be true of different colours, it muſt be no leſs ſo, of the different ſhades of the ſame colour; and each ſhade produces a diſtinct idea, independent of the reſt. For if this ſhould be deny'd, 'tis poſſible, by the continual gradation of ſhades, to run a colour inſenſibly into what is moſt remote from it; and if you will not allow any of the means to be different, you cannot, without abſurdity, deny the extremes to be the ſame. Suppoſe, therefore, a perſon to have enjoy'd his ſight for thirty years, and to have become perfectly well

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mind has but a ſlender hold of them: They are apt to be confounded with other reſembling ideas: And when we have often employ'd any term, tho' without a diſtinct meaning, we are apt to imagine that it has a determinate idea, annex'd to it. On the contrary, all impreſſions, that is, all ſenſations, either outward or inward, are ſtrong and ſenſible: The limits betwixt them are more exactly determin'd: Nor is it eaſy to fall into any error or miſtake with regard to them. When we entertain therefore any ſuſpicion, that a philoſophical term is employ'd without any meaning or idea (as is but too frequent) we need but enquire, *from what impreſſion is that ſuppos'd idea deriv'd?* And if it be impoſſible to aſſign any, this will ſerve to confirm our ſuſpicion. By bringing ideas into ſo clear a light, we may reaſonably hope to remove all diſpute, which may ariſe, concerning their nature and reality *.

* 'Tis probable, that no more was meant by thoſe, who deny'd innate ideas, than that all ideas were copies of our impreſſions; tho' it muſt be confeſs'd, that the terms which they employ'd were not choſen with ſuch caution, nor ſo exactly defin'd as to prevent all miſtakes about their doctrine. For what is meant by *innate?* If innate be equivalent to natural, then all the perceptions and ideas of the mind muſt be allow'd to be innate or natural, in whatever ſenſe we take the latter word, whether in oppoſition to what is uncommon, artificial, or miraculous. If by innate be meant, cotemporary to our birth, the diſpute ſeems to be frivolous; nor it it worth while to enquire at what time thinking begins, whether before, at, or after our birth. Again, the *word, idea,* ſeems to be commonly taken in a very looſe ſenſe,

ſenſe, even by Mr. *Locke* himſelf, as ſtanding for any of our perceptions, our ſenſations and paſſions, as well as thoughts. Now in this ſenſe, I ſhould deſire to know, what can be meant by aſſerting, that ſelf-love, or reſentment of injuries, or the paſſion betwixt the ſexes is not innate?

But admitting theſe terms, *impreſſions* and *ideas*, in the ſenſe above explain'd, and underſtanding by *innate* what is original or copy'd from no precedent perception, then may we aſſert, that all our impreſſions are innate, and our ideas not innate.

To be ingenuous, I muſt own it to be my opinion, that Mr. *Locke* was betray'd into this queſtion by the ſchoolmen, who making uſe of undefin'd terms, draw out their diſputes to a tedious length, without ever touching the point in queſtion. A like ambiguity and circumlocution ſeem to run thro' all that great philoſopher's reaſonings on this ſubject.

ESSAY III.

Of the ASSOCIATION *of* IDEAS.

'TIS evident, that there is a principle of connexion betwixt the different thoughts or ideas of the mind, and that in their appearance to the memory or imagination, they introduce each other with a certain degree of method and regularity. In our more ſerious thinking or diſcourſe, this is ſo obſervable, that any particular thought, which breaks in upon this regular tract or chain of ideas, is immediately remark'd and rejected. And even in our wildeſt and moſt wandering reveries, nay in our very dreams, we ſhall find, if we reflect, that the imagination ran not altogether at adventures, but that there was ſtill a connexion upheld among the different ideas, which ſucceeded each other. Were the looſeſt and freeſt converſation to be tranſcrib'd, there would immediately be obſerv'd ſomething, which connected it in all its tranſitions. Or where this is wanting, the perſon, who broke the thread of diſcourſe, might

ſtill inform you, that there had ſecretly revolv'd in his mind a ſucceſſion of thought, which had gradually led him away from the ſubject of converſation. Amongſt the languages of different nations, even where we cannot ſuſpect the leaſt connexion or communication, 'tis found, that the words, expreſſive of ideas, the moſt compounded, do yet nearly correſpond to each other: A certain proof, that the ſimple ideas, comprehended in the compound ones, were bound together by ſome univerſal principle, which had an equal influence on all mankind.

THO' it be too obvious to eſcape obſervation, that different ideas are connected together; I do not find, that any philoſopher has attempted to enumerate or claſs all the principles of aſſociation; a ſubject, however, that ſeems very worthy of curioſity. To me, there appear to be only three principles of connexion among ideas, *viz. Reſemblance*, *Contiguity* in time or place, and *Cauſe* or *Effect*.

THAT theſe principles ſerve to connect ideas will not, I believe, be much doubted. A picture naturally leads our thoughts to the original *: The mention of one apartment in a building naturally introduces an enquiry or diſcourſe concerning the others †: And if, we

* Reſemblance. † Contiguity.

we think of a wound, we can ſcarce forbear reflecting on the pain, which follows it *. But that this enumeration is compleat, and that there are no other principles of aſſociation, except theſe, may be difficult to prove to the ſatisfaction of the reader, or even to a man's own ſatisfaction. All we can do, in ſuch caſes, is to run over ſeveral inſtances, and examine carefully the principle, which binds the different thoughts to each other, never ſtopping till we render the principle as general as poſſible. The more inſtances we examine, and the more care we employ, the more aſſurance ſhall we acquire, that the enumeration, which we form from the whole, is compleat and entire. Inſtead of entering into a detail of this kind, which would lead us into many uſeleſs ſubtilties, we ſhall conſider ſome of the effects of this connexion upon the paſſions and imagination; where we may open a field of ſpeculation more entertaining, and perhaps more inſtructive, than the other.

As man is a reaſonable being, and is continually in purſuit of happineſs, which he hopes to attain by the gratification of ſome paſſion or affection, he ſeldom acts or ſpeaks or thinks without a purpoſe and intention. He has ſtill ſome object in view; and however improper the means may ſometimes be,

* Cauſe and Effect.

which he chuſes for the attainment of his end, he never loſes view of an end, nor will he ſo much as throw away his thoughts or reflections, where he hopes not to reap any ſatisfaction from them.

In all compoſitions of genius, therefore, 'tis requiſite that the writer have ſome plan or object; and tho' he may be hurry'd from this plan by the vehemence of thought, as in an ode, or drop it careleſly, as in an epiſtle or eſſay, there muſt appear ſome aim or intention, in his firſt ſetting out, if not in the compoſition of the whole work. A production without a deſign would reſemble more the ravings of a madman, than the ſober efforts of genius and learning.

As this rule admits of no exception, it follows, that in narrative compoſitions, the events or actions, which the writer relates, muſt be connected together, by ſome bond or tye: They muſt be related to each other in the imagination, and form a kind of *Unity*, which may bring them under one plan or view, and which may be the object or end of the writer in his firſt undertaking.

This connecting principle among the ſeveral events, which form the ſubject of a poem or hiſtory, may be very different, according to the different de-

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ſigns of the poet or hiſtorian. *Ovid* has form'd his plan upon the connecting principle of reſemblance. Every fabulous transformation, produc'd by the miraculous power of the gods, falls within the compaſs of his work. There needs but this one circumſtance in any event to bring it under his original plan or intention.

AN annaliſt or hiſtorian, who ſhould undertake to write the hiſtory of *Europe* during any century, would be influenc'd by the connexion of contiguity in time and place. All events, which happen in that portion of ſpace, and period of time, are comprehended in his deſign, tho' in other reſpects different and unconnected. They have ſtill a ſpecies of unity, amidſt all their diverſity.

BUT the moſt uſual ſpecies of connexion among the different events, which enter into any narrative compoſition, is that of cauſe and effect; while the hiſtorian traces the ſeries of actions according to their natural order, remounts to their ſecret ſprings and principles, and delineates their moſt remote conſequences. He chuſes for his ſubject a certain portion of that great chain of events, which compoſe the hiſtory of mankind: Each link in this chain he endeavours to touch in his narration: Sometimes, unavoidable ignorance renders all his attempts fruitleſs.

Sometimes, he ſupplies by conjecture what is wanting in knowlege: And always, he is ſenſible, that the more unbroken the chain is, which he preſents to his readers, the more perfect is his production. He ſees, that the knowlege of cauſes is not only the moſt ſatisfactory; this relation or connexion being the ſtrongeſt of all others; but alſo the moſt inſtructive; ſince it is by this knowlege alone, we are enabled to controul events, and govern futurity.

HERE therefore we may attain ſome notion of that *Unity* of *Action*, about which all critics, after *Ariſtotle*, have talk'd ſo much: Perhaps, to little purpoſe, while they directed not their taſte or ſentiment by the accuracy of philoſophy. It appears, that in all productions, as well as in the epic and tragic, there is a certain unity requir'd, and that, on no occaſion, can our thoughts be allow'd to run at adventures, if we would produce a work, which will give any laſting entertainment to mankind. It appears alſo, that even a biographer, who ſhould write the life of *Achilles*, would connect the events, by ſhewing their mutual dependance and relation, as much as a poet, who ſhould make the anger of that hero, the ſubject of his narration *. Nor only in any limited portion of

* Contrary to *Ariſtotle*, Μῦθος δ' ἐστὶν εἷς, οὐχ, ὥσπερ τινὲς οἴονται, ἐὰν περὶ ἕνα ᾖ. Πολλὰ γὰρ, καὶ ἄπειρα τοῦ γίνεται συμβαίνει, ἐξ ὧν ἐνίων οὐδέν ἐστιν ἕν. Οὕτω δὲ καὶ πράξεις ἑνὸς πολλαί ἐστιν, ἐξ ὧν μία οὐδεμία γίνεται πρᾶξις, &c. Κεφ. η.

of life, a man's actions have a dependance on each other, but also during the whole period of his duration, from the cradle to the grave; nor is it possible to strike off one link, however minute, in this regular chain, without affecting the whole series of events, which follow. The unity of action, therefore, which is to be found in biography or history, differs from that of epic poetry, not in kind, but in degree. In epic poetry, the connexion among the events is more close and sensible: The narration is not carry'd on thro' such a length of time: And the actors hasten to some remarkable period, which satisfies the curiosity of the reader. This conduct of the epic poet depends on that particular situation of the *Imagination* and of the *Passions*, which is suppos'd in that production. The imagination, both of writer and reader, is more enliven'd, and the passions more enflam'd than in history, biography, or any species of narration, which confine themselves to strict truth and reality. Let us consider the effect of these two circumstances, an enliven'd imagination and enflam'd passions, circumstances, which belong to poetry, especially the epic kind, above any other species of composition; and let us examine the reason why they require a stricter and closer unity in the fable.

FIRST. All poetry, being a species of painting, approaches us nearer to the objects than any other

ſpecies of narration, throws a ſtronger light upon them, and delineates more diſtinctly thoſe minute circumſtances, which, tho' to the hiſtorian they ſeem ſuperfluous, ſerve mightily to enliven the imagery, and gratify the fancy. If it be not neceſſary, as in the *Iliad*, to inform us each time the hero buckles his ſhoes, and ties his garters, 'twill be requiſite, perhaps, to enter into a greater detail than in the *Henriade*; where the events are run over with ſuch rapidity, that we ſcarce have leiſure to become acquainted with the ſcene or action. Were a poet, therefore, to comprehend in his ſubject any great compaſs of time or ſeries of events, and trace up the death of *Hector* to its remote cauſes, in the rape of *Helen*, or the judgment of *Paris*, he muſt draw out his poem to an immeaſurable length, in order to fill this large canvas with juſt painting and imagery. The reader's imagination, enflam'd with ſuch a ſeries of poetical deſcriptions, and his paſſions, agitated by a continual ſympathy with the actors, muſt flag long before the period of the narration, and muſt ſink into laſſitude and diſguſt, from the repeated violence of the ſame movements.

SECONDLY. That an epic poet muſt not trace the cauſes to any great diſtance, will farther appear, if we conſider another reaſon, which is drawn from a property of the paſſions ſtill more remarkable and ſingular.

gular. 'Tis evident, that, in a just composition, all the affections, excited by the different events, describ'd and represented, add mutual force to each other; and that, while the heroes are all engag'd in one common scene, and each action is strongly connected with the whole, the concern is continually awake, and the passions make an easy transition from one object to another. The strong connection of the events, as it facilitates the passage of the thought or imagination from one to another, facilitates also the transfusion of the passions, and preserves the affections still in the same channel and direction. Our sympathy and concern for *Eve* prepares the way for a like sympathy with *Adam*: The affection is preserv'd almost entire in the transition; and the mind seizes immediately the new object as strongly related to that which formerly engag'd its attention. But were the poet to make a total digression from his subject, and introduce a new actor, no way connected with the personages, the imagination, feeling a breach in the transition, would enter coldly into the new scene; would kindle by slow degrees; and in returning to the main subject of the poem, would pass, as it were, upon foreign ground, and have its concern to excite anew, in order to take party with the principal actors. The same inconvenience follows in a less degree, where the poet traces his events to too great a distance, and binds together actions, which,

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perſonages, no way related to the former; to find ſo ſenſible a breach or vacuity in the courſe of the paſſions, by means of this breach in the connexion of ideas; and inſtead of carrying the ſympathy of one ſcene into the following, to be oblig'd, every moment, to excite a new concern, and take party in a new ſcene of action?

BUT tho' this rule of unity of action be common to dramatic and epic poetry; we may ſtill obſerve a difference betwixt them, which may, perhaps, deſerve our attention. In both theſe ſpecies of compoſition, 'tis requiſite that the action be one and ſimple, in order to preſerve the concern or ſympathy entire and undiverted: But in epic or narrative poetry, this rule is alſo eſtabliſh'd upon another foundation, *viz.* the neceſſity, that is incumbent on every writer, to form ſome plan or deſign, before he enter on any diſcourſe or narration, and to comprehend his ſubject in ſome general aſpect or united view, which may be the conſtant object of his attention. As the author is entirely loſt in dramatic compoſitions, and the ſpectator ſuppoſes himſelf to be really preſent at the actions repreſented; this reaſon has no place with regard to the ſtage; but any dialogue or converſation may be introduc'd, which, without improbability, might have paſs'd in that determinate portion of ſpace, repreſented by the theatre. Hence in all

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our *English* comedies, even those of *Congreve*, the unity of action is never strictly observ'd; but the poet thinks it sufficient, if his personages be any way related to each other, by blood, or by living in the same family; and he afterwards introduces them in particular scenes, where they display their humours and characters, without much forwarding the main action. The double plots of *Terence* are licences of the same kind; but in a less degree. And tho' this conduct be not perfectly regular, it is not wholly unsuitable to the nature of comedy, where the movements and passions are not rais'd to such a height as in tragedy; at the same time, that the fiction or representation palliates, in some measure, such licences. In a narrative poem, the first proposition or design confines the author to one subject; and any digressions of this nature would, at first view, be rejected, as absurd and monstrous. Neither *Boccace*, *la Fontaine*, nor any author of that kind, tho' pleasantry be their chief object, have ever indulg'd them.

To return to the comparison of history and epic poetry, we may conclude, from the foregoing reasonings, that as a certain unity is requisite in all productions, it cannot be wanting to history more than to any other; that in history, the connexion among the several events, which unites them into

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one body, is the relation of cauſe and effect, the ſame which takes place in epic poetry; and that in the latter compoſition, this connexion is only requir'd to be cloſer and more ſenſible, on account of the lively imagination and ſtrong paſſions, which muſt be touch'd by the poet in his narration. The *Peloponneſian* war is a proper ſubject for hiſtory, the ſiege of *Athens* for an epic poem, and the death of *Alcibiades* for a tragedy.

As the difference, therefore, betwixt hiſtory and epic poetry conſiſts only in the degrees of connexion, which bind together thoſe ſeveral events, of which their ſubject is compos'd, 'twill be difficult, if not impoſſible, by words, to determine exactly the bounds, which ſeparate them from each other. That is a matter of taſte more than of reaſoning; and perhaps, this unity may often be diſcovered in a ſubject, where, at firſt view, and from an abſtract conſideration, we ſhould leaſt expect to find it.

'TIS evident, that *Homer*, in the courſe of his narration, exceeds the firſt propoſition of his ſubject; and that the anger of *Achilles*, which caus'd the death of *Hector*, is not the ſame with that which produc'd ſo many ills to the *Greeks*. But the ſtrong connexion betwixt theſe two movements, the quick

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tranſition from one to another, the contraſte * betwixt the effects of concord and diſcord amongſt the princes, and the natural curioſity which we have to ſee *Achilles* in action, after ſuch long repoſe; all theſe cauſes carry on the reader, and produce a ſufficient unity in the ſubject.

It may be objected to *Milton*, that he has trac'd up his cauſes to too great a diſtance, and that the rebellion of the angels produces the fall of man by a train of events, which is both very long and very caſual. Not to mention that the creation of the world, which he has related at length, is no more the cauſe of that cataſtrophe, than of the battle of *Pharſalia*, or any other event, that has ever happen'd. But if we conſider, on the other hand, that all theſe events, the rebellion of the angels, the creation of the world, and the fall of man, *reſemble* each other, in being miraculous and out of the common courſe of nature; that they are ſuppos'd to be *contiguous* in time; and that being detach'd from all other events, and being the only original facts, which revelation diſcovers, they ſtrike the eye at once, and naturally

* Contraſte or contrariety is a ſpecies of connexion among ideas, which may, perhaps, be conſider'd as a ſpecies of reſemblance. Where two objects are contrary, the one deſtroys the other, *i. e.* is the cauſe of his annihilation, and the idea of the annihilation of an object implies the idea of *former* exiſtence.

naturally recall each other to the thought or imaginations: If we consider all these circumstances, I say, we shall find, that these parts of the action have a sufficient unity to make them be comprehended in one fable or narration. To which we may add, that the rebellion of the angels and the fall of man have a peculiar resemblance as being counterparts to each other, and presenting to the reader, the same moral, of obedience to our creator.

THESE loose hints I have thrown together, in order to excite the curiosity of philosophers, and beget a suspicion at least, if not a full persuasion, that this subject is very copious, and that many operations of the human mind depend on the connexion or association of ideas, which is here explain'd. Particularly, the sympathy betwixt the passions and imagination will, perhaps, appear remarkable; while we observe that the affections, excited by one object, pass easily to another connected with it; but transfuse themselves with difficulty, or not at all, along different objects, which have no manner of connexion together. By introducing, into any composition, personages and actions, foreign to each other, an injudicious author loses that communication of emotions, by which alone he can interest the heart, and raise the passions to their proper height and period. The full explication of this principle and all its consequences would

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lead us into reasonings too profound and too copious for these essays. 'Tis sufficient, at present, to have established this conclusion, that the three connecting principles of all ideas are the relations of *Resemblance*, *Contiguity*, and *Causation*.

ESSAY

ESSAY IV.

SCEPTICAL DOUBTS *concerning the* OPERATIONS *of the* UNDERSTANDING.

PART I.

ALL the objects of human reason or enquiry may naturally be divided into two kinds, *viz.* *Relations of Ideas* and *Matters of Fact.* Of the first kind are the propositions in Geometry, Algebra, and Arithmetic; and in short, every proposition, which is either intuitively or demonstratively certain. *That the square of the hypothenuse is equal to the squares of the two sides,* is a proposition, which expresses a relation betwixt these figures. *That three times five is equal to the half of thirty,* expresses a relation betwixt these numbers. Propositions of this kind are discoverable by the mere operation of thought, without dependance on what is any where existent in the universe. Tho' there never were a true circle or tri-

angle in nature, the truths demonſtrated by *Euclid*, would for ever retain their certainty and evidence.

MATTERS of fact, which are the ſecond objects of human reaſon, are not aſcertain'd in the ſame manner; nor is our evidence of their truth, however great, of a like nature with the foregoing. The contrary of every matter of fact is ſtill poſſible; becauſe it can never imply a contradiction, and is conceiv'd by the mind with equal diſtinctneſs and facility, as if ever ſo conformable to truth and reality. *That the ſun will not riſe to-morrow* is no leſs intelligible a propoſition, and implies no more contradiction, than the affirmation, *that it will riſe*. We ſhould in vain, therefore, attempt to demonſtrate its falſhood. Were it demonſtratively falſe, it would imply a contradiction, and could never be diſtinctly conceiv'd by the mind.

IT may, therefore, be a ſubject, worthy curioſity, to enquire what is the nature of that evidence, which aſſures us of any real exiſtence and matter of fact, beyond the preſent teſtimony of our ſenſes, or the records of our memory. This part of philoſophy, 'tis obſervable, has been little cultivated, either by the ancients or moderns; and therefore our doubts and errors, in the proſecution of ſo important an enquiry, may be the more excuſable, while we march

thro'

thro' ſuch difficult paths, without any guide or direction. They may even prove uſeful, by exciting curioſity, and deſtroying that implicit faith and ſecurity, which is the bane of all reaſoning and free enquiry. The diſcovery of defects in the common philoſophy, if any ſuch there be, will not, I preſume, be a diſcouragement, but rather an incitement, as is uſual, to attempt ſomething more full and ſatisfactory, than has yet been propos'd to the public.

ALL reaſonings concerning matter of fact ſeem to be founded in the relation of *Cauſe* and *Effect*. By means of that relation alone can we go beyond the evidence of our memory and ſenſes. If you were to aſk a man, why he believes any matter of fact, which is abſent; for inſtance, that his friend is in the country, or in *France*; he would give you a reaſon; and this reaſon would be ſome other fact; as a letter receiv'd from him, or the knowlege of his former reſolutions and promiſes. A man, finding a watch or any other machine in a deſert iſland, would conclude, that there had once been men in that iſland. All our reaſonings concerning fact are of the ſame nature. And here 'tis conſtantly ſuppos'd, that there is a connexion between the preſent fact and that infer'd from it. Were there nothing to bind them together, the inference would be altogether precarious. The hearing of an articulate voice and rational diſ-

courſe in the dark aſſures us of the preſence of ſome perſon: Why? becauſe theſe are the effects of the human make and fabric, and cloſely connected with it. If we anatomize all the other reaſonings of this nature, we ſhall find, that they are founded in the relation of cauſe and effect, and that this relation is either near or remote, direct or collateral. Heat and light are collateral effects of fire, and the one effect may juſtly be infer'd from the other.

If we would ſatisfy ourſelves, therefore, concerning the nature of that evidence, which aſſures us of all matters of fact, we muſt enquire how we arrive at the knowlege of cauſe and effect.

I shall venture to affirm, as a general propoſition, which admits of no exception, that the knowlege of this relation is not, in any inſtance, attain'd by reaſonings *à priori*; but ariſes entirely from experience, when we find, that any particular objects are conſtantly conjoin'd with each other. Let an object be preſented to a man of ever ſo ſtrong natural reaſon and abilities; if that object be entirely new to him, he will not be able, by the moſt accurate examination of its ſenſible qualities, to diſcover any of its cauſes or effects. *Adam*, tho' his rational faculties be ſuppos'd, at the very firſt, entirely perfect, could not have infer'd from the fluidity and tranſpa-

rency

ency of water, that it would ſuffocate him, or from the light and warmth of fire, that it would conſume him. No object ever diſcovers, by the qualities which appear to the ſenſes, either the cauſes, which produc'd it, or the effects, which will ariſe from it; nor can our reaſon, unaſſiſted by experience, ever draw any inferences concerning real exiſtence and matter of fact.

THIS propoſition, *that cauſes and effects are diſcoverable, not by reaſon, but by experience*, will readily be admitted with regard to ſuch objects, as we remember, to have been once altogether unknown to us; ſince we muſt be conſcious of the utter inability which we then lay under of foretelling what would ariſe from them. Preſent two ſmooth pieces of marble to a man, who has no tincture of natural philoſophy; he will never diſcover, that they will adhere together in ſuch a manner as to require great force to ſeparate them in a direct line, while they make ſo ſmall reſiſtance to a lateral preſſure. Such events, as bear little analogy to the common courſe of nature, are alſo readily confeſs'd to be known only by experience; nor does any man imagine that the exploſion of gunpowder, or the attraction of a loadſtone could ever be diſcover'd by arguments *à priori*. In like manner, when an effect is ſuppos'd to de-

pend upon an intricate machinery or ſecret ſtr
of parts, we make no difficulty to attribute a
knowlege of it to experience. Who will aſſer
he can give the ultimate reaſon, why milk or
is proper nouriſhment for a man, not for a lyo
tyger ?

But the ſame truth may not appear, at firſt
to have the ſame evidence with regard to
which have become familiar to us from our fi
pearance in the world, which bear a cloſe a
to the whole courſe of nature, and which ar
pos'd to depend on the ſimple qualities of c
without any ſecret ſtructure of parts. We are
imagine, that we could diſcover theſe effects,
mere operations of our reaſon, without expe
We fancy, that, were we brought, on a ſudde
this world, we could at firſt have infer'd, th
Billiard-ball would communicate motion to a
upon impulſe ; and that we needed not to
waited for the event, in order to pronounce wi
tainty concerning it. Such is the influence
tom, that, where it is ſtrongeſt, it not only
our natural ignorance, but even conceals itſel
ſeems not to take place, merely becauſe it is fo
the higheſt degree.

BUT to convince us, that all the laws of nature and all the operations of bodies, without exception, are known only by experience, the following reflections may, perhaps, ſuffice. Were any object preſented to us, and were we requir'd to pronounce concerning the effect, which will reſult from it, without conſulting paſt obſervation; after what manner, I beſeech you, muſt the mind proceed in this operation? It muſt invent or imagine ſome event, which it aſcribes to the object as its effect; and 'tis plain that this invention muſt be entirely arbitrary. The mind can never poſſibly find the effect in the ſuppos'd cauſe, by the moſt accurate ſcrutiny and examination. For the effect is totally different from the cauſe, and conſequently can never be diſcover'd in it. Motion in the ſecond Billiard-ball is a quite diſtinct event from motion in the firſt; nor is there any thing in the one to ſuggeſt the ſmalleſt hint of the other. A ſtone or piece of metal rais'd into the air, and left without any ſupport, immediately falls: But to conſider the matter *à priori*; is there any thing we diſcover in this ſituation, which can beget the idea of a downward, rather than an upward, or any other motion, in the ſtone or metal?

AND as the firſt imagination or invention of a particular effect, in all natural operations, is arbitrary,

where we consult not experience; so must we also esteem the suppos'd tye or connexion betwixt the cause and effect, which binds them together, and renders it impossible, that any other effect could result from the operation of that cause. When I see, for instance, a Billiard-ball moving in a strait line towards another; even suppose motion in the second ball should by accident be suggested to me, as the result of their contact or impulse; may I not conceive, that a hundred different events might as well follow from that cause? May not both these balls remain at absolute rest? May not the first ball return in a strait line, or leap off from the second in any line or direction? All these suppositions are consistent and conceivable. Why then should we give the preference to one, which is no more consistent nor conceivable than the rest? All our reasonings *à priori* will never be able to shew us any foundation for this preference.

In a word, then, every effect is a distinct event from its cause. It could not, therefore, be discover'd in the cause, and the first invention or conception of it, *à priori*, must be entirely arbitrary. And even after it is suggested, the conjunction of it with the cause must appear equally arbitrary; since there are always many other effects, which, to reason, must seem fully as consistent and natural. In vain, there-

therefore, ſhou'd we pretend to determine any ſingle event, or infer any cauſe or effect, without the aſſiſtance of obſervation and experience.

HENCE we may diſcover the reaſon, why no philoſopher, who is rational and modeſt, has ever pretended to aſſign the ultimate cauſe of any natural operation, or to ſhow diſtinctly the action of that power, which produces any ſingle effect in the univerſe. 'Tis confeſs'd, that the utmoſt effort of human reaſon is, to reduce the principles, productive of natural phænomena, to a greater ſimplicity, and to reſolve the many particular effects into a few general cauſes, by means of reaſonings from analogy, experience, and obſervation. But as to the cauſes of theſe general cauſes, we ſhould in vain attempt their diſcovery; nor ſhall we ever be able to ſatisfy ourſelves, by any particular explication of them. Theſe ultimate ſprings and principles are totally ſhut up from human curioſity and enquiry. Elaſticity, gravity, coheſion of parts, communication of motion by impulſe; theſe are probably the ultimate cauſes and principles which we ſhall ever diſcover in nature; and we may eſteem ourſelves ſufficiently happy, if, by accurate enquiry and reaſoning, we can trace up the particular phænomena to, or near to, theſe general principles. The moſt perfect philoſophy of the natural kind only ſtaves off our ignorance

a little longer: As perhaps the moſt perfect
ſophy of the moral or metaphyſical kind ſerve
to diſcover larger portions of our ignorance.
the obſervation of human ignorance and weak
the reſult of all philoſophy, and meets us, at
turn, in ſpite of our endeavours to conquer,
void it.

Nor is geometry, when taken into the affi
of natural philoſophy, ever able to remedy th
fect, or lead us into the knowlege of ultimate c
by all that accuracy of reaſoning, for which i
juſtly celebrated. Every part of mix'd mat
tics goes upon the ſuppoſition, that certain la
eſtabliſh'd by nature in her operations; and al
reaſonings are employ'd, either to aſſiſt expe
in the diſcovery of theſe laws, or to determine
influence in particular inſtances, where it de
upon any preciſe degrees of diſtance and qua
Thus 'tis a law of motion, diſcover'd by exper
that the moment or force of any body in mo
in the compound ratio or proportion of its ſolid
tents and its velocity; and conſequently, that a
force may remove the greateſt obſtacle or rai
greateſt weight, if by any contrivance or mach
we can encreaſe the velocity of that force, ſo
make it an overmatch for its antagoniſt. Geo
aſſiſts us in the application of this law, by giv

the juſt dimenſions of all the parts and figures, which can enter into any ſpecies of machine; but ſtill the diſcovery of the law itſelf is owing merely to experience, and all the abſtract reaſonings in the world could never lead us one ſtep towards the knowlege of it. When we reaſon *à priori*, and conſider merely any object or cauſe, as it appears to the mind, independent of all obſervation, it never could ſuggeſt to us the notion of any diſtinct object, ſuch as its effect; much leſs, ſhew us the inſeparable and inviolable connexion betwixt them. A man muſt be very ſagacious, who could diſcover by reaſoning, that cryſtal is the effect of heat and ice of cold, without being previouſly acquainted with the operations of theſe qualities.

PART II.

BUT we have not, as yet, attain'd any tolerable ſatisfaction with regard to the queſtion firſt propos'd. Each ſolution ſtill gives riſe to a new queſtion as difficult as the foregoing, and leads us on to farther enquiries. When it is aſk'd, *What is the nature of all our reaſonings concerning matter of fact?* the proper anſwer ſeems to be, that they are founded on the relation of cauſe and effect. When again it is aſk'd, *What is the foundation of all our reaſonings and concluſions concerning that relation?* it may be reply'd in one word, EXPERIENCE. But if we ſtill carry on

our ſifting and examining humour, and aſk, *What is the foundation of all our concluſions from experience?* this implies a new queſtion, which may be of more difficult ſolution and explication. Philoſophers, that give themſelves airs of ſuperior wiſdom and ſufficiency, have a hard taſk, when they encounter perſons of inquiſitive diſpoſitions, who puſh them from every corner, to which they retreat, and who are ſure at laſt to bring them to ſome dangerous dilemma. The beſt expedient to prevent this confuſion is to be modeſt in our pretenſions; and even to diſcover the difficulty ourſelves before it is objected to us. By this means, we may make a kind of merit of our very ignorance.

I SHALL content myſelf, in this eſſay, with an eaſy taſk, and ſhall pretend only to give a negative anſwer to the queſtion here propos'd. I ſay then, that even after we have experience of the operations of cauſe and effect, our concluſions from that experience are *not* founded on reaſoning or any proceſs of the underſtanding. This anſwer we muſt endeavour, both to explain, and to defend.

It muſt certainly be allow'd, that nature has kept us at a great diſtance from all her ſecrets, and has afforded us only the knowlege of a few ſuperficial qualities of objects, while ſhe conceals from us thoſe

powers

powers and principles, on which the influence of these objects entirely depends. Our senses inform us of the colour, weight, and consistence of bread; but neither senses nor reason ever can inform us of those qualities, which fit it for the nourishment and support of a human body. Sight or feeling conveys an idea of the actual motion of bodies; but as to that wonderful force or power, which would carry on a moving body for ever in a continu'd change of place, and which bodies never lose but by communicating it to others; of this we cannot form the most distant conception. But notwithstanding this ignorance of natural powers * and principles, we always presume, where we see like sensible qualities, that they have like secret powers, and lay our account, that effects, similar to those, which we have experienc'd, will follow from them. If a body of like colour and consistence with that bread, which we have formerly eat, be presented to us, we make no scruple of repeating the experiment, and expect, with certainty, like nourishment and support. Now this is a process of the mind or thought, of which I would willingly know the foundation. 'Tis allow'd on all hands, that there is no known connexion betwixt the sensible qualities and the secret powers; and consequently,

* The word, Power, is here us'd in a loose and popular sense. The more accurate explication of it wou'd give additional evidence to this argument. See Essay vii.

that the mind is not led to form ſuch a concluſion concerning their conſtant and regular conjunction, by any thing which it knows of their nature. As to paſt *Experience*, it can be allow'd to give *direct* and *certain* information only of thoſe preciſe objects, and that preciſe period of time, which fell under its cognizance: But why this experience ſhould be extended to future times, and to other objects, which, for aught we know, may be only in appearance ſimilar; this is the main queſtion on which I would inſiſt. The bread, which I formerly eat, nouriſh'd me; that is, a body, of ſuch ſenſible qualities, was, at that time, endow'd with ſuch ſecret powers: But does it follow, that other bread muſt alſo nouriſh me at another time, and that like ſenſible qualities muſt always be attended with like ſecret powers? The conſequence ſeems no way neceſſary. At leaſt, it muſt be acknowleg'd, that there is here a conſequence drawn by the mind; that there is a certain ſtep taken; a proceſs of thought, and an inference, which wants to be explain'd. Theſe two propoſitions are far from being the ſame, *I have found that ſuch an object has always been attended with ſuch an effect*, and, *I foreſee, that other objects, which are, to appearance, ſimilar, will be attended with ſimilar effects*. I ſhall allow, if you pleaſe, that the one propoſition may juſtly be infer'd from the other: I know in fact, that it always is infer'd. But if you inſiſt, that the inference is made by

a chain

a chain of reasoning, I desire you to produce that reasoning. The connexion betwixt these propositions is not intuitive. There is requir'd a medium, which may enable the mind to draw such an inference, if indeed it be drawn by reasoning and argument. What that medium is, I must confess, passes my comprehension; and 'tis incumbent on those to produce it, who assert, that it really exists, and is the origin of all our conclusions concerning matter of fact.

THIS negative argument must certainly, in process of time, become altogether convincing, if many penetrating and able philosophers shall turn their enquiries this way; and no one be ever able to discover any connecting proposition or intermediate step, which supports the understanding in this conclusion. But as the question is yet new, every reader may not trust so far to his own penetration, as to conclude, because an argument escapes his research and enquiry, that therefore it does not really exist. For this reason it may be requisite to venture upon a more difficult task; and enumerating all the branches of human knowlege, endeavour to shew, that none of them can afford such an argument.

ALL reasonings may be divided into two kinds, *viz.* demonstrative reasonings or those concerning relations of ideas, and moral reasonings or those con-

cerning matter of fact and existence. That there are no demonstrative arguments in the case, seems evident; since it implies no contradiction, that the course of nature may change, and that an object seemingly like those which we have experienc'd, may be attended with different or contrary effects. May I not clearly and distinctly conceive, that a body falling from the clouds, and which, in all other respects, resembles snow, has yet the taste of salt or feeling of fire? Is there any more intelligible proposition than to affirm, that all the trees will flourish in *December* and *January*, and decay in *May* and *June*? Now whatever is intelligible, and can be distinctly conceiv'd, implies no contradiction, and can never be prov'd false by any demonstrative arguments or abstract reasonings *à priori*.

If we be, therefore, engag'd by arguments to put trust in past experience, and make it the standard of our future judgment, these arguments must be probable only, or such as regard matter of fact and real existence, according to the division above mention'd. But that there are no arguments of this kind, must appear, if our explication of that species of reasoning be admitted as solid and satisfactory. We have said, that all arguments concerning existence are founded on the relation of cause and effect; that our knowlege of that relation is deriv'd entirely from expe-

experience, and that all our experimental conclusions proceed upon the supposition, that the future will be conformable to the past. To endeavour, therefore, the proof of this last supposition by probable arguments, or arguments regarding existence, must be evidently going in a circle, and taking that for granted, which is the very point in question.

IN reality, all arguments from experience are founded on the similarity, which we discover among natural objects, and by which we are induc'd to expect effects similar to those, which we have found to follow from such objects. And tho' none but a fool or madman will ever pretend to dispute the authority of experience, or to reject that great guide of human life; it may surely be allow'd a philosopher to have so much curiosity at least, as to examine the principle of human nature, which gives this mighty authority to experience, and makes us draw advantage from that similarity, which nature has plac'd among different objects. From causes, which *appear* similar, we expect similar effects. This is the sum of all our experimental conclusions. Now it seems evident, that if this conclusion were form'd by reason, it would be as perfect at first, and upon one instance, as after ever so long a course of experience. But the case is far otherwise. Nothing so like as eggs; yet no one, on account of this apparent similarity,

larity, expects the same taste and relish in all of them. 'Tis only after a long course of uniform experiments in any kind, that we attain a firm reliance and security with regard to a particular event. Now where is that process of reasoning, which from one instance draws a conclusion, so different from that which it infers from a hundred instances, that are no way different from that single instance? This question I propose as much for the sake of information, as with an intention of raising difficulties. I cannot find, I cannot imagine any such reasoning. But I keep my mind still open to instruction, if any one will vouchsafe to bestow it on me.

Should it be said, that from a number of uniform experiments, we *infer* a connexion betwixt the sensible qualities and the secret powers; this, I must confess, seems the same difficulty, couch'd in different terms. The question still recurs, On what process of argument this *inference* is founded? Where is the medium, the interposing ideas, which join propositions so very wide of each other? 'Tis confess'd, that the colour, consistence, and other sensible qualities of bread appear not, of themselves, to have any connexion with the secret powers of nourishment and support. For otherwise we could infer these secret powers from the first appearance of these sensible qualities, without the aid of experience; contrary to

the ſentiment of all philoſophers, and contrary to plain matter of fact. Here then is our natural ſtate of ignorance with regard to the powers and influence of all objects. How is this remedy'd by experience? It only ſhews us a number of uniform effects, reſulting from certain objects, and teaches us, that thoſe particular objects, at that particular time, were endow'd with ſuch powers and forces. When a new object, endow'd with ſimilar ſenſible qualities is produc'd, we expect ſimilar powers and forces, and lay our account with a like effect. From a body of like colour and conſiſtence with bread, we look for like nouriſhment and ſupport. But this ſurely is a ſtep or progreſs of the mind, which wants to be explain'd. When a man ſays, *I have found, in all paſt inſtances, ſuch ſenſible qualities, conjoin'd with ſuch ſecret powers:* And when he ſays, *ſimilar ſenſible qualities will always be conjoin'd with ſimilar ſecret powers*; he is not guilty of a tautology, nor are theſe propoſitions in any reſpect the ſame. You ſay that the one propoſition is an inference from another. But you muſt confeſs, that the inference is not intuitive; neither is it demonſtrative: Of what nature is it then? To ſay it is experi- [illegible] is begging the queſtion. For all inferences [illegible]rience ſuppoſe, as their foundation, that [illegible] will reſemble the paſt, and that ſimilar pow- [illegible] conjoin'd with ſimilar ſenſible qualities. [illegible]cion, that the courſe of nature

may

may change, and that the paſt may be no rule for the future, all experience becomes uſeleſs, and can give riſe to no inference or concluſion. 'Tis impoſſible, therefore, that any arguments from experience can prove this reſemblance of the paſt to the future; ſince all theſe arguments are founded on the ſuppoſition of that reſemblance. Let the courſe of things be allow'd hitherto never ſo regular; that alone, without ſome new argument or inference, proves not, that, for the future, it will continue ſo. In vain do you pretend to have learnt the nature of bodies from your paſt experience. Their ſecret nature, and conſequently, all their effects and influence may change, without any change in their ſenſible qualities. This happens ſometimes, and with regard to ſome objects: Why may it not happen always, and with regard to all objects? What logic, what proceſs of argument ſecures you againſt this ſuppoſition? My practice, you ſay, refutes my doubts. But you miſtake the purport of my queſtion. As an agent, I am quite ſatisfy'd in the point: But as a philoſopher, who has ſome ſhare of curioſity, I will not ſay ſcepticiſm, I want to learn the foundation of this inference. No reading, no enquiry has yet been able to remove my difficulty, or give me ſatisfaction in a matter of ſuch vaſt importance. Can I do better than propoſe the difficulty to the public, even tho', perhaps, I have ſmall hopes of obtaining a ſolution? We ſhall at

leaſt,

eaſt, by this means, be ſenſible of our ignorance, if we do not augment our knowlege.

I MUST confeſs, that a man is guilty of unpardonable arrogance, who concludes, becauſe an argument has eſcap'd his own inveſtigation and enquiry, that therefore it does not really exiſt. I muſt alſo confeſs, that tho' all the learned, for ſeveral ages, ſhould have employ'd their time in fruitleſs ſearch upon any ſubject, it may ſtill, perhaps, be raſh to conclude poſitively, that the ſubject muſt, therefore, paſs all human comprehenſion. Even tho' we examine all the ſources of our knowlege, and conclude them unfit for ſuch a ſubject, there may ſtill remain a ſuſpicion, that the enumeration is not compleat, or the examination not accurate. But with regard to the preſent ſubject, there are ſome conſiderations, which ſeem to remove all this accuſation of arrogance or ſuſpicion of miſtake.

'TIS certain, that the moſt ignorant and ſtupid peaſants, nay infants, nay even brute beaſts improve by experience, and learn the qualities of natural objects, by obſerving the effects, which reſult from them. When a child has felt the ſenſation of pain from touching the flame of a candle, he will be careful not to put his hand near any candle; but will expect a ſimilar effect from a cauſe, which is ſimilar in its ſenſible qualities and appearance. If you aſ-

ſert

ſert, therefore, that the underſtanding of the child is led into this concluſion by any proceſs of argument or ratiocination, I may juſtly require you to produce that argument; nor have you any pretext to refuſe ſo equitable a demand. You cannot ſay, that the argument is abſtruſe, and may poſſibly eſcape your ſearch and enquiry; ſince you confeſs, that it is obvious to the capacity of a mere infant. If you heſitate, therefore, a moment, or if, after reflection, you produce any intricate and profound argument, you, in a manner, give up the queſtion, and confeſs, that it is not reaſoning, which engages us to ſuppoſe the paſt reſembling the future, and to expect ſimilar effects from cauſes, which are, to appearance, ſimilar. This is the propoſition, which I intended to enforce by the preſent eſſay. If I be right, I pretend to have made no mighty diſcovery. And if I be wrong, I muſt acknowlege myſelf to be indeed a very backward ſcholar; ſince I cannot now diſcover an argument, which, it ſeems, was perfectly familiar to me, long before I was out of my cradle.

ESSAY V.

SCEPTICAL SOLUTION *of those* DOUBTS.

PART I.

THE paſſion for philoſophy, like that for religion, ſeems liable to this inconvenience, that, tho' it aims at the correction of our manners and extirpation of our vices, it may only ſerve, by imprudent management, to foſter a predominant inclination, and puſh the mind, with more determin'd reſolution, towards that ſide, which already *draws* too much, by the byaſs and propenſity of the natural temper. 'Tis certain, that, while we aſpire to the magnanimous firmneſs of the philoſophic ſage, and endeavour to confine our pleaſures altogether within our own minds, we may, at laſt, render our philoſophy, like that of *Epictetus* and other *Stoicks*, only a more refin'd ſyſtem of ſelfiſhneſs, and reaſon ourſelves out of all virtue, as well as ſocial enjoyment. While we ſtudy with attention the vanity of human life, and

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a ſudden into this world; he would, indeed, imm diately obſerve a continual ſucceſſion of objects, a one event following another; but he would not able to diſcover any thing farther. He would not, firſt, by any reaſoning, be able to reach the idea cauſe and effect; ſince the particular powers, b which all natural operations are perform'd, never ap pear to the ſenſes; nor is it reaſonable to conclude merely becauſe one event, in one inſtance, precede another, that therefore the one is the cauſe, and th other the effect. Their conjunction may be arbi trary and caſual. There may be no reaſon to infe the exiſtence of the one from the appearance of th other. And in a word, ſuch a perſon, without mor experience, could never employ his conjecture o reaſoning concerning any matter of fact, or be aſ- ſur'd of any thing beyond what was immediately preſent to his memory and ſenſes.

Suppose again, that he has acquir'd more exp rience, and has liv'd ſo long in the world as to hav obſerv'd ſimilar objects or events to be conſtantly conjoin'd together; what is the conſequence of th experience? He immediately infers the exiſtence o the one object from the appearance of the other. Yet he has not, by all his experience, acquir'd any idea or knowlege of the ſecret power, by which th one object produces the other; nor is it, by any pro- cei

ıd resentment. By flattering no irregular passion, gains few partizans: By opposing so many vices nd follies, it raises to itself abundance of enemies, ho stigmatize it as libertine, prophane, and irregious.

NOR need we fear, that this philosophy, while it ndeavours to limit our enquiries to common life, hould ever undermine the reasonings of common ife, and carry its doubts so far as to destroy all action, as well as speculation. Nature will always naintain her rights, and prevail in the end over any bstract reasoning whatsoever. Tho' we should conlude, for instance, as in the foregoing essay, that, n all reasonings from experience, there is a step aken by the mind, which is not supported by any rgument or process of the understanding; there is o danger, that these reasonings, on which almost all nowlege depends, will ever be affected by such a liscovery. If the mind be not engag'd by argunent to make this step, it must be induc'd by some ther principle of equal weight and authority; and hat principle will preserve its influence as long as uman nature remains the same. What that principle s, may well be worth the pains of enquiry.

SUPPOSE a person, tho' endow'd with the strongest aculties of reason and reflection, to be brought on

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and flame, for instance, weight and solidity, we are determin'd by custom alone to expect the one from the appearance of the other. This hypothesis seems even the only one, which explains the difficulty, why we draw, from a thousand instances, an inference, which we are not able to draw from one instance, that is, in no respect, different from them. Reason is incapable of any such variation. The conclusions, which it draws from considering one circle, are the same, which it would form upon surveying all the circles in the universe. But no man, having seen only one body move after being impell'd by another, could infer, that every other body will move after a like impulse. All inferences from experience, therefore, are effects of custom, not of reasoning *.

CUSTOM,

* Nothing is more usual than for writers even on *moral*, *political*, or *physical* subjects to distinguish betwixt *reason* and *experience*, and to suppose, that these species of argumentation are entirely different from each other. The former are taken for the mere result of our intellectual faculties, which, by considering *à priori* the nature of things, and examining the effects, that must follow from their operation, establish particular principles of science and philosophy. The latter are supposed to be deriv'd entirely from sense and observation, by which we learn what has actually resulted from the operation of particular objects, and are thence able to infer what will, for the future, result from them. Thus, for instance, the limitations and restraints of civil government and a legal constitution may be defended, either from *reason*, which, reflecting on the great frailty and corruption of human nature, teaches, that no man can safely be trusted with *unlimited* authority; or from *experience* and history, which inform

CUSTOM, then, is the great guide of human life. 'Tis that principle alone, which renders our experience useful to us, and makes us expect for the future a similar train of events with those which have appear'd in the past. Without the influence of custom, we should be entirely ignorant of every matter of fact, beyond what is immediately present to the memory

inform us of the enormous abuses, that ambition, in every age and country, has been found to make of so imprudent a confidence.

The same distinction betwixt reason and experience is maintain'd in all our deliberations concerning the conduct of life; while the experienc'd statesman, general, physician, or merchant is trusted and follow'd; and the unpractic'd novice, with whatever natural talents endow'd, neglected and despis'd. Tho' it be allow'd, that reason may form very plausible conjectures with regard to the consequences of such a particular conduct in such particular circumstances; 'tis still suppos'd imperfect, without the assistance of experience, which is alone able to give stability and certainty to the maxims, deriv'd from study and reflection.

But notwithstanding that this distinction be thus universally receiv'd, both in the active and speculative scenes of life, I shall not scruple to pronounce, that, in my opinion, it is, at bottom, erroneous, or at least, superficial.

If we examine those arguments, which, in any of the sciences above-mentioned, are suppos'd to be the mere effects of reasoning and reflection, they will all be found to terminate, at last, in some general principle or conclusion, for which we can assign no reason but observation and experience. The only difference betwixt them and those maxims, which are vulgarly esteem'd the result of pure experience, is, that the former cannot be establish'd without some process of thought, and some reflection on what we have observ'd, in order to distinguish its circumstances, and trace its consequences: Whereas in the latter the experienc'd event is exactly and fully similar to that which we infer as the result o

memory and ſenſes. We ſhould never know how to adjuſt means to ends, or to employ our natural powers in the production of any effect. There would be an end at once of all action, as well as of the chief part of ſpeculation.

But here it may be proper to remark, that tho' our concluſions from experience carry us beyond our memory and ſenſes, and aſſure us of matters of fact,

any particular ſituation. The hiſtory of a *Tiberius* or a *Nero* makes us dread a like tyranny were our monarchs freed from the reſtraints of laws and ſenates: But the obſervation of any fraud or cruelty in private life is ſufficient, with the aid of a little thought, to give us the ſame apprehenſion; while it ſerves as an inſtance of the general corruption of human nature, and ſhows us the danger which we muſt incur by repoſing an entire confidence in mankind. In both caſes, 'tis experience which is ultimately the foundation of our inference and concluſion.

There is no man ſo young and unexperienc'd, as not to have form'd, from obſervation, many general and juſt maxims concerning human affairs and the conduct of life; but it muſt be confeſs'd, that, when a man comes to put theſe in practice, he will be extremely liable to error, till time and farther experience, both enlarge theſe maxims, and teach him their proper uſe and application. In every ſituation or incident, there are many particular and ſeemingly minute circumſtances, which the man of greateſt talents is, at firſt, apt to overlook, tho' on them the juſtneſs of his concluſions, and conſequently, the prudence of his conduct, entirely depend. Not to mention, that, to a young beginner, the general obſervations and maxims occur not always on the proper occaſions, nor can be immediately apply'd with due calmneſs and diſtinction. The truth is, an unexperienc'd reaſoner could be no reaſoner at all, were he abſolutely unexperienc'd; and when we aſſign that character to any one, we mean it only in a comparative ſenſe, and ſuppoſe him poſſeſs'd of experience in a ſmaller and more imperfect degree.

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which happen'd in the moſt diſtant places and moſt remote ages; yet ſome fact muſt always be preſent to the ſenſes or memory, from which we may firſt proceed in drawing theſe concluſions. A man, who ſhould find in a deſert country the remains of pompous buildings, would conclude, that the country had, in antient times, been cultivated by civiliz'd inhabitants; but did nothing of this nature occur to him, he could never form ſuch an inference. We learn the events of former ages from hiſtory; but then we muſt peruſe the volumes, in which this inſtruction is contain'd, and thence carry up our inferences from one teſtimony to another, till we arrive at the eye-witneſſes and ſpectators of theſe diſtant events. In a word, if we proceed not upon ſome fact, preſent to the memory or ſenſes, our reaſonings would be merely hypothetical; and however the particular links might be connected with each other, the whole chain of inferences would have nothing to ſupport it, nor could we ever, by its means, arrive at the knowlege of any real exiſtence. If I aſk, why you believe any particular matter of fact, which you relate, you muſt tell me ſome reaſon; and this reaſon will be ſome other fact, connected with it: But as you cannot proceed after this manner, *in infinitum*, you muſt at laſt terminate in ſome fact, which is preſent to your memory or ſenſes; or muſt allow, that your belief is entirely without foundation.

WHAT then is the conclusion of the whole matter? A simple one; tho', it must be confess'd, pretty remote from the common theories of philosophy. All belief of matter of fact or real existence is deriv'd merely from some object, present to the memory or senses, and a customary conjunction betwixt that and any other object. Or in other words; having found, in many instances, that any two kinds of objects, flame and heat, snow and cold, have always been conjoin'd together; if flame or snow be presented anew to our senses; the mind is carry'd by custom to expect heat or cold, and to *believe*, that such a quality does exist, and will discover itself upon a nearer approach. This belief is the necessary result of placing the mind in such circumstances. 'Tis an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love, when we receive benefits, or hatred, when we meet with injuries. All these operations are a species of natural instincts, which no reasoning or process of the thought and understanding is able, either to produce, or to prevent.

AT this point, it would be very allowable for us to stop our philosophical researches. In most questions, we can never make a single step farther; and *in* all questions, we must terminate here at last, after our

our moſt reſtleſs and curious enquiries. But ſtill our curioſity will be pardonable, perhaps commendable, if it carry us on to ſtill farther reſearches, and make us examine more accurately the nature of this *belief*, and of the *cuſtomary conjunction*, whence it is deriv'd. By this means, we may meet with ſome explications and analogies, that will give ſatisfaction; at leaſt to ſuch as love the abſtract ſciences, and can be entertain'd with ſpeculations, which, however accurate, may ſtill retain a degree of doubt and uncertainty. As to readers of a different taſte; the remaining part of this eſſay is not calculated for them, and the following eſſays may well be underſtood, tho' it be neglected.

PART II.

THERE is nothing more free than the imagination of man; and tho' it cannot exceed that original ſtock of ideas, which is furniſh'd by the internal and external ſenſes, it has unlimited power of mixing, compounding, ſeparating and dividing theſe ideas, to all the varieties of fiction and viſion. It can feign a train of events, with all the appearance of reality, aſcribe to them a particular time and place, conceive them as exiſtent, and paint them out to itſelf with every circumſtance, that belongs to any hiſtorical fact, which it believes with the greateſt certainty.

Wherein, therefore, consists the difference betwixt such a fiction and belief? It lies not merely in any peculiar idea, which is annex'd to such a conception, as commands our assent, and which is wanting to every known fiction. For as the mind has authority over all its ideas, it could voluntarily annex this particular idea to any fiction, and consequently be able to believe whatever it pleases; contrary to what we find by daily experience. We can, in our conception, join the head of a man to the body of a horse; but it is not in our power to believe, that such an animal has ever really existed.

It follows, therefore, that the difference betwixt *fiction* and *belief* lies in some sentiment or feeling, which is annex'd to the latter, not to the former, and which depends not on the will, nor can be commanded at pleasure. It must be excited by nature, like all other sentiments; and must arise from the particular situation, in which the mind is plac'd at any particular juncture. Whenever any object is presented to the memory or senses, it immediately, by the force of custom, carries the imagination to conceive that object, which is usually conjoin'd to it; and this conception is attended with a feeling or sentiment, different from the loose reveries of the fancy. In this consists the whole nature of belief. For as there is no matter of fact which we believe so firmly,

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that we cannot conceive the contrary, there would be no difference betwixt the conception assented to, and that which is rejected, were it not for some sentiment, which distinguishes the one from the other. If I see a billiard-ball moving towards another, on a smooth table, I can easily conceive it to stop upon contact. This conception implies no contradiction; but still it feels very differently from that conception, by which I represent to myself the impulse, and the communication of motion from one ball to another.

WERE we to attempt a *definition* of this sentiment, we should, perhaps, find it a very difficult, if not an impossible task; in the same manner as if we should endeavour to define the feeling of cold or passion of anger, to a creature who never had an experience of these sentiments. BELIEF is the true and proper name of this feeling; and no one is ever at a loss to know the meaning of that term; because every man is every moment conscious of the sentiment, represented by it. It may not, however, be improper to attempt a *description* of this sentiment; in hopes we may, by that means, arrive at some analogies, which may afford a more perfect explication of it. I say then, that belief is nothing but a more vivid, lively, forcible, firm, steady conception of an object, than what the imagination alone is ever able to attain. This variety of terms, which may seem

so unphilosophical, is intended only to express that act of the mind, which renders realities, or what is taken for such, more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. Provided we agree about the thing, 'tis needless to dispute about the terms. The imagination has the command over all its ideas, and can join and mix and vary them, in all the ways possible. It may conceive fictitious objects with all the circumstances of place and time. It may set them, in a manner, before our eyes, in their true colours, just as they might have existed. But as it is impossible, that that faculty of imagination can ever, of itself, reach belief, 'tis evident, that belief consists not in the peculiar nature or order of ideas, but in the *manner* of their conception, and in their *feeling* to the mind. I confess, that 'tis impossible perfectly to explain this feeling or manner of conception. We may make use of words, which express something near it. But its true and proper name, as we observ'd before, is *belief*; which is a term, that every one sufficiently understands in common life. And in philosophy, we can go no farther than assert, that *belief* is something felt by the mind, which distinguishes the ideas of the judgment from the fictions of the imagination. It gives them more force and influence; makes them appear of greater importance;

inforces them in the mind; and renders them the governing principle of all our actions. I hear at present, for instance, a person's voice, with whom I am acquainted; and the sound comes as from the next room. This impression of my senses immediately conveys my thought to the person, along with all the surrounding objects. I paint them out to myself as existing at present, with the same qualities and relations, of which I formerly knew them possest. These ideas take faster hold of my mind, than ideas of an inchanted castle. They are very different to the feeling, and have a much greater influence of every kind, either to give pleasure or pain, joy or sorrow.

LET us, then, take in the whole compass of this doctrine, and allow, that the sentiment of belief is nothing but a conception of an object more intense and steady than what attends the mere fictions of the imagination, and that this *manner* of conception arises from a customary conjunction of the object with something present to the memory or senses: I believe that it will not be difficult, upon these suppositions, to find other operations of the mind analogous to it, and to trace up these phænomena to principles still more general.

We have already obſerv'd, that nature has eſtabliſh'd connexions among particular ideas, and that no ſooner one idea occurs to our thoughts than it introduces its correlative, and carries our attention towards it, by a gentle and inſenſible movement. Theſe principles of connexion or aſſociation we have reduced to three, *viz. Reſemblance, Contiguity*, and *Cauſation*; which are the only bonds, that unite our thoughts together, and beget that regular train of reflection or diſcourſe, which, in a greater or leſs degree, takes place amongſt all mankind. Now here ariſes a queſtion, on which the ſolution of the preſent difficulty will depend. Does it happen, in all theſe relations, that, when one of the objects is preſented to the ſenſes or memory, the mind is not only carry'd to the conception of the correlative, but reaches a ſteadier and ſtronger conception of it than what otherwiſe it would have been able to attain? This ſeems to be the caſe with that belief, which ariſes from the relation of cauſe and effect. And if the caſe be the ſame with the other relations or principles of aſſociation, we may eſtabliſh this as a general law, which takes place in all the operations of the mind.

We may, therefore, obſerve, as the firſt experiment to our preſent purpoſe, that, upon the appearance

ance of the picture of an absent friend, our idea of him is evidently enliven'd by the *resemblance*, and that every passion, which that idea occasions, whether of joy or sorrow, acquires new force and vigour. In producing this effect, there concur both a relation and a present impression. Where the picture bears him no resemblance, or at least was not intended for him, it never so much as conveys our thought to him: And where it is absent, as well as the person; tho' the mind may pass from the thought of the one to that of the other; it feels its idea to be rather weaken'd than enliven'd by that transition. We take a pleasure in viewing the picture of a friend, when 'tis set before us; but when 'tis remov'd, rather chuse to consider him directly, than by reflection in an image, which is equally distant and obscure.

THE ceremonies of the *Roman Catholic* religion may be consider'd as experiments of the same nature. The devotees of that superstition usually plead in excuse of the mummeries, with which they are upbraided, that they feel the good effect of those external motions, and postures, and actions, in enlivening their devotion and quickening their fervour, which otherwise would decay, if directed entirely to distant and immaterial objects. We shadow out the objects of our faith, say they, in sensible types and images, and render them more present to us by the

immediate presence of these types, than 'tis possible for us to do, merely by an intellectual view and contemplation. Sensible objects have always a greater influence on the fancy than any other; and this influence they readily convey to those ideas, to which they are related, and which they resemble. I shall only infer from these practices, and this reasoning, that the effect of resemblance in enlivening the idea is very common; and as in every case a resemblance and a present impression must concur, we are abundantly supply'd with experiments to prove the reality of the foregoing principle.

We may add force to these experiments by others of a different kind, in considering the effects of *contiguity* as well as of *resemblance*. 'Tis certain that distance diminishes the force of every idea, and that upon our approach to any object; tho' it does not discover itself to our senses; it operates upon the mind with an influence, which imitates an immediate impression. The thinking on any object readily transports the mind to what is contiguous; but 'tis only the actual presence of an object, that transports it with a superior vivacity. When I am a few miles from home, whatever relates to it touches me more nearly than when I am two hundred leagues distant; tho' even at that distance the reflecting on any thing in the neighbourhood of my friends or family natu-

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rally produces an idea of them. But as in this latter case, both the objects of the mind are ideas; notwithstanding there is an easy transition betwixt them; that transition alone is not able to give a superior vivacity to any of the ideas, for want of some immediate impression *.

No one can doubt but causation has the same influence as the other two relations of resemblance and contiguity. Superstitious people are fond of the relicts of saints and holy men, for the same reason, that they seek after types or images, in order to enliven their devotion, and give them a more intimate and strong conception of those exemplary lives, which they desire to imitate. Now 'tis evident, that

* *Naturane nobis, inquit, datum dicam, an errore quodam, ut, cum ea loca videamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam siquando eorum ipsorum aut facta audiamus aut scriptum aliquod legamus? Velut ego nunc moveor. Venit enim mihi* Platonis *in mentem, quem accepimus primum hic disputare solitum: Cujus etiam illi hortuli propinqui non memoriam solum mihi afferunt, sed ipsum videntur in conspectu meo hic ponere. Hic* Speusippus, *hic* Xenocrates, *hic ejus auditor* Polemo; *cujus ipsa illa sessio fuit, quam videamus. Equidem etiam curiam nostram,* Hostiliam *dico, non hanc novam, quæ mihi minor esse videtur postquam est major, solebam intuens,* Scipionem, Catonem, Lælium, *nostrum vero in primis ævum cogitare.* Tanta vis admonitionis est in locis; ut non sine causa ex his memoriæ deducta sit disciplina. CICERO *de Finibus. Lib.* 5.

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one of the beſt relicts, which a devotee could procure, would be the handywork of a ſaint; and if his cloaths and furniture are ever to be conſider'd in this light, 'tis becauſe they were once at his diſpoſal, and were mov'd and affected by him; in which reſpect they are to be conſider'd as imperfect effects, and as connected with him by a ſhorter chain of conſequences than any of thoſe, by which we learn the reality of his exiſtence.

Suppose, that the ſon of a friend, who had been long dead or abſent, were preſented to us; 'tis evident, that this object would inſtantly revive its correlative idea, and recal to our thoughts all paſt intimacies and familiarities in more lively colours than they would otherwiſe have appear'd to us. This is another phænomenon, which ſeems to prove the principle above-mention'd.

We may obſerve, that in theſe phænomena the belief of the correlative object is always pre-ſuppos'd; without which the relation could have no effect in inlivening the idea. The influence of the picture ſuppoſes, that we *believe* our friend to have once exiſted. Contiguity to home can never excite our ideas of home, unleſs we *believe* that it really exiſts. Now I aſſert, that this belief, where it reaches beyond the memory or ſenſes, is of a ſimilar nature,

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and arises from similar causes, with the transition of thought and vivacity of conception here explain'd. When I throw a piece of dry wood into a fire, my mind is immediately carry'd to conceive, that it augments, not extinguishes the flame. This transition of thought from the cause to the effect proceeds not from reason. It derives its origin altogether from custom and experience. And as it first begins from an object, present to the senses, it renders the idea or conception of flame more strong and lively than any loose, floating reverie of the imagination. That idea arises immediately. The thought moves instantly towards it, and conveys to it all that force of conception, which is deriv'd from the impression present to the senses. When a sword is level'd at my breast, does not the idea of wound and pain strike me more strongly, than when a glass of wine is presented to me, even tho' by accident this idea should occur after the appearance of the latter object? But what is there in this whole matter to cause such a strong conception, except only a present object and customary transition to the idea of another object, which we have been accustom'd to conjoin with the former? This is the whole operation of the mind in all our conclusions concerning matter of fact and existence; and 'tis a satisfaction to find some analogies, by which it may be explain'd. The transition from a

present

preſent object does in all caſes give ſtrength and ſolidity to the related idea.

HERE is a kind of pre-eſtabliſh'd harmony betwixt the courſe of nature and the ſucceſſion of our ideas; and tho' the powers and forces, by which the former is govern'd, be wholly unknown to us, yet our thoughts and conceptions have ſtill, we find, gone on in the ſame train with the other works of nature. Cuſtom is that admirable principle, by which this correſpondence has been effected; ſo neceſſary to the ſubſiſtence of our ſpecies, and the regulation of our conduct, in every circumſtance and occurrence of human life. Had not the preſence of an object inſtantly excited the idea of thoſe objects, commonly conjoin'd with it, all our knowlege muſt have been limited to the narrow ſphere of our memory and ſenſes; and we ſhould never have been able to adjuſt means to ends, nor employ our natural powers, either to the producing of good, or avoiding of evil. Thoſe, who delight in the diſcovery and contemplation of *final cauſes*, have here ample ſubject to employ their wonder and admiration.

I SHALL add, for a further confirmation of the foregoing theory, that as this operation of the mind, by which we infer like effects from like cauſes, and *vice verſa*, is ſo eſſential to the ſubſiſtence of all human

man creatures, it is not probable that it could be trusted to the fallacious deductions of our reason, which is slow in its operations; appears not, in any degree, during the first years of infancy; and at best is, in every age and period of human life, extremely liable to error and mistake. 'Tis more conformable to the ordinary wisdom of nature to secure so necessary an act of the mind, by some instinct or mechanical tendency, which may be infallible in its operations, may discover itself at the first appearance of life and thought, and may be independent of all the labour'd deductions of the understanding. As nature has taught us the use of our limbs, without giving us the knowlege of the muscles and nerves, by which they are actuated; so has she implanted in us an instinct, which carries forward the thought in a correspondent course to that which she has establish'd among external objects; tho' we are ignorant of those powers and forces, on which this regular course and succession of objects totally depends.

ESSAY VI.

Of PROBABILITY*.

THO' there be no ſuch thing as *Chance* in the world; our ignorance of the real cauſe of any event has the ſame influence on the underſtanding, and begets a like ſpecies of belief or opinion.

THERE is certainly a probability, which ariſes from a ſuperiority of chances on any ſide; and according as this ſuperiority encreaſes, and ſurpaſſes the oppoſite chances, the probability receives a proportionable encreaſe, and begets ſtill a higher degree of belief or aſſent to that ſide, in which we diſcover the ſuperiority.

* Mr. *Locke* divides all arguments into demonſtrative and probable. In this view, we muſt ſay, that 'tis only probable all men muſt die, or that the ſun will riſe to-morrow. But to conform our language more to common uſe, we ſhould divide arguments into *demonſtrations*, *proofs*, and *probabilities*. By proofs meaning ſuch arguments from experience as leave no room for doubt or oppoſition.

ſmaller number of views, and recurs leſs frequently to the mind. If we allow, that belief is nothing but a firmer and ſtronger conception of an object than what attends the mere fictions of the imagination, this operation may, perhaps, in ſome meaſure, be accounted for. The concurrence of theſe ſeveral views or glimpſes imprints its idea more ſtrongly on the imagination; gives it ſuperior force and vigour; renders its influence on the paſſions and affections more ſenſible; and in a word, begets that reliance or ſecurity, which conſtitutes the nature of belief and opinion.

THE caſe is the ſame with the probability of cauſes as with that of chance. There are ſome cauſes, which are entirely uniform and conſtant in producing a particular effect; and no inſtance has ever yet been found of any failure or irregularity in their operation. Fire has always burnt, and water ſuffocated every human creature: The production of motion by impulſe and gravity is an univerſal law, which has hitherto admitted of no exception. But there are other cauſes which have been found more irregular and uncertain; nor has rhubarb prov'd always a purge, or opium a ſoporific to every one, who has taken theſe medicines. 'Tis true; when any cauſe fails of producing its uſual effect, philoſophers aſcribe not this to any irregularity in nature; but ſuppoſe, that ſome ſecret cauſes, in the particular ſtructure of parts, have

have prevented the operation. Our reasonin
ever, and conclusions concerning the even
same as if this principle had no place. Being de
by custom to transfer the past to the future, i
inferences; where the past has been entirely re
uniform, we expect the event with the great
ance, and leave no room for any contrary sup
But where different effects have been found
from causes, which are *to appearance* exactly
all these various effects must occur to the mind
ferring the past to the future, and enter into
sideration, when we determine the probabili
event. Tho' we give the preference to that w
been found most usual, and believe that this e
exist, we must not overlook the other effects,
give each of them a particular weight and a
in proportion as we have found it to be mor
frequent. 'Tis more probable, in every plac
rope, that there will be frost sometime in *Janu*
that the weather will continue open through
whole month; tho' this probability varies ac
to the different climates, and approaches to a c
in the more northern kingdoms. Here then
evident, that when we transfer the past to the
in order to determine the effect, which will refl
any cause, we transfer all the different events
same proportion as they have appear'd in t
and conceive one to have existed a hundred

for inſtance, another ten times, and another once. As a great number of views do here concur in one event, they fortify and confirm it to the imagination, beget that ſentiment which we call *belief*, and give it the preference above its antagoniſt, which is not ſupported by an equal number of experiments, and occurs not ſo frequently to the thought in transferring the paſt to the future. Let any one try to account for this operation of the mind upon any of the received ſyſtems of philoſophy, and he will be ſenſible of the difficulty. For my part, I ſhall think it ſufficient, if the preſent hints excite the curioſity of philoſophers, and make them ſenſible how extremely defective all common theories are, in treating of ſuch curious and ſuch ſublime ſubjects.

ESSAY

ESSAY VII.

Of the IDEA *of necessary* CONNEXION.

PART I.

THE great advantage of the mathematical sciences above the moral consists in this, that the ideas of the former, being sensible, are always clear and determinate, the smallest distinction betwixt them is immediately perceptible, and the same terms are still expressive of the same ideas, without ambiguity or variation. An oval is never mistaken for a circle, nor an hyperbola for an ellipsis. The isosceles and scalenum are distinguish'd by boundaries more exact than vice and virtue, right and wrong. If any term be defin'd in geometry, the mind readily, of itself, substitutes, on all occasions, the definition for the term defin'd: Or even when no definition is

employ'd, the object itself may be presented to the senses, and by that means be steadily and clearly apprehended. But the finer sentiments of the mind, the operations of the understanding, the various agitations of the passions, tho' really in themselves distinct, easily escape us, when survey'd by reflection; nor is it in our power to recall the original object, as often as we have occasion to contemplate it. Ambiguity, by this means, is gradually introduc'd into our reasonings: Similar objects are readily taken to be the same, and the conclusion becomes, at last, [illegible] of the premises.

[illegible] however, affirm, that if we con[illegible] in a proper light, their advan[illegible] very nearly compen[illegible] and reduce both of them to a state of [illegible] the mind with greater facility retains [illegible] of geometry clear and determinate, it must [illegible] on a much longer and more intricate chain of [illegible], and compare ideas much wider of each [illegible] in order to reach the abstruser truths of that [illegible] And if moral ideas are apt, without extreme [illegible], to fall into obscurity and confusion, the in[illegible] are always much shorter in these disquisitions, [illegible]termediate steps, which lead to the conclu[illegible] fewer than in the sciences, which treat [illegible] and number. In reality, there is scarce a pro-

proposition of *Euclid* so simple as not to consist of more parts, than are to be found in any moral reasoning, which runs not into chimera and conceit. Where we trace the principles of the human mind thro' a few steps, we may be very well satisfy'd with our progress; if we consider how soon nature throws a bar to all our enquiries concerning causes, and reduces us to an acknowlegement of our ignorance. The chief obstacle, therefore, to our improvement in the moral or metaphysical sciences is the obscurity of the ideas, and ambiguity of the terms. The principal difficulty in the mathematics is the length of inferences and compass of thought, requisite to the forming any conclusion. And perhaps, our progress in natural philosophy is chiefly retarded by the want of proper experiments and phænomena, which often are discover'd by chance, and cannot always be found, when requisite, even by the most diligent and prudent enquiry. As moral philosophy seems hitherto to have received less improvements than either geometry or physics, we may conclude, that, if there be any difference in this respect among these sciences, the difficulties, which obstruct the progress of the former, require superior care and capacity to be surmounted.

THERE are no ideas, which occur in metaphysics, more obscure and uncertain, than those of *power*, *force*, *energy*, or *necessary connexion*, of which it is every

moment neceſſary for us to treat in all our diſquiſitions. We ſhall, therefore, endeavour, in this eſſay, to fix, if poſſible, the preciſe meaning of theſe terms, and thereby remove ſome part of that obſcurity, which is ſo much complain'd of in this ſpecies of philoſophy.

It ſeems a propoſition, which will not admit of much diſpute, that all our ideas are nothing but copies of our impreſſions, or in other words, that 'tis impoſſible for us to *think* of any thing, which we have not antecedently *felt*, either by our external or internal ſenſes. I have endeavour'd in a former eſſay * to explain and prove this propoſition, and have expreſs'd my hopes, that, by a proper application of it, men may reach a greater clearneſs and preciſion in philoſophical reaſonings, than what they have hitherto been ever able to attain. Complex ideas may, perhaps, be well known by definition, which is nothing but an enumeration of thoſe parts or ſimple ideas, that compoſe them. But when we have puſh'd up definitions to the moſt ſimple ideas, and find ſtill ſome ambiguity and obſcurity; what reſource are we then poſſeſs'd of? By what invention can we throw light upon theſe ideas, and render them altogether preciſe and determinate to our intellectual

* Eſſay II.

lectual view? Produce the impreſſions or original ſentiments, from which the ideas are copy'd. Theſe impreſſions are all ſtrong and ſenſible. They admit not of ambiguity and obſcurity. They are not only plac'd in a full light themſelves, but may throw light on their correſpondent ideas, which lie in obſcurity. And by this means, we may, perhaps, attain a new microſcope or ſpecies of optics, by which, in the moral ſciences, the moſt minute and moſt ſimple ideas may be ſo enlarg'd as to fall readily under our apprehenſion, and be equally known with the groſſeſt and moſt ſenſible ideas, which can be the object of our enquiry.

To be fully acquainted, therefore, with the idea of power or neceſſary connexion, let us examine its impreſſion; and in order to find the impreſſion with greater certainty, let us ſearch for it in all the ſources, from which it may poſſibly be deriv'd.

WHEN we look about us towards external objects, and conſider the operation of cauſes, we are never able, in a *ſingle* inſtance, to diſcover any power or neceſſary connexion; any quality, which binds the effect to the cauſe, and renders the one an infallible conſequence of the other. We only find, that the one does actually, in fact, follow the other. The impulſe of one billiard-ball is attended with motion

in the ſecond. This is the whole, that appears to the *outward* ſenſes. The mind feels no ſentiment or *inward* impreſſion from this ſucceſſion of objects: Conſequently, there is not in any ſingle, particular inſtance of cauſe and effect, any thing which can ſuggeſt the idea of power or neceſſary connexion.

From the firſt appearance of an object, we never can conjecture what effect will reſult from it. But were the power or energy of any cauſe diſcoverable by the mind, we could foreſee the effect, even without experience, and might, at firſt, pronounce with certainty concerning it, by the mere dint of thought and reaſoning.

In reality, there is no part of matter, that does ever, by its ſenſible qualities, diſcover any power or energy, or give us ground to imagine, that it could produce any thing, or be follow'd by any other object, which we could denominate its effect. Solidity, extenſion, motion; theſe qualities are all compleat in themſelves, and never point out any other event, which may reſult from them. The ſcenes of the univerſe are continually ſhifting, and one object follows another in an uninterrupted ſucceſſion; but the power or force, which actuates the whole machine, is entirely conceal'd from us, and never diſcovers itſelf in *any of* the ſenſible qualities of body. We know, that

that, in fact, heat is a constant attendant of flame; but what is the connexion betwixt them, we have no room so much as to conjecture or imagine. 'Tis impossible, therefore, that the idea of power can be deriv'd from the contemplation of bodies, in single instances of their operation; because no bodies ever discover any power, which can be the original of this idea *.

SINCE, therefore, external objects, as they appear to the senses, give us no idea of power or necessary connexion, by their operations in particular instances; let us see, whether this idea be deriv'd from reflection on the operations of our own minds, and be copy'd from any internal impression. It may be said, that we are every moment conscious of power in our own minds, while we feel, that, by the simple command of our will, we can move the organs of our body, or direct the faculties of our minds, in their operation. An act of volition produces motion in our limbs, or raises a new idea in our imagination. This influence of the will we know by consciousness.

* Mr. *Locke*, in his chapter of power, says, that finding from experience, that there are several new productions in matter, and concluding that there must somewhere be a power, capable of producing them, we arrive at last by this reasoning at the idea of power. But no reasoning can ever give us a new, original, simple idea; as this philosopher himself confesses. This, therefore, can never be the original *of that idea.*

influence over a material one, that the most refin'd thought is able to actuate the grossest matter? Were we empower'd, by a secret wish, to remove mountains, or controul the planets in their orbit; this extensive authority would not be more extraordinary, nor more beyond our comprehension. But if by consciousness we perceiv'd any power or energy in the will, we must know this power; we must know its connexion with the effect; we must know the secret union of soul and body, and the nature of both these substances; by which the one is able to operate, in so many instances, upon the other.

Secondly, We are not able to move all the organs of the body with a like authority; tho' we cannot assign any other reason, besides experience, for so remarkable a difference betwixt one and the other. Why has the will an influence over the tongue and fingers, and not over the heart or liver? This question would never embarrass us, were we conscious of a power in the former case, and not in the latter. We should, then, perceive, independent of experience, why the authority of will over the organs of the body is circumscrib'd within such particular limits. Being in that case fully acquainted with the power or force, by which it operates, we should also

know, why its influence reaches precisely to such boundaries, and no farther.

A MAN, struck suddenly with a palsy in the leg or arm, or who had newly lost those members, frequently endeavours, at first, to move them, and employ them in their usual offices. Here he is as much conscious of power to command such limbs, as a man in perfect health is conscious of power to actuate any member, which remains in its natural state and condition. But consciousness never deceives. Consequently, neither in the one case nor in the other, are we ever conscious of any power. We learn the influence of our will from experience alone. And experience only teaches us, how one event constantly follows another, without instructing us in the secret connexion, which binds them together, and renders them inseparable.

Thirdly, We learn from anatomy, that the immediate object of power in voluntary motion, is not the member itself, which is mov'd, but certain muscles, and nerves, and animal spirits, and perhaps, something still more minute, and more unknown, thro' which the motion is successively propagated, 'ere it reach the member itself, whose motion is the immediate object of volition. Can there be a more certain proof, that the power, by which this whole operation

ration is perform'd, so far from being directly and fully known by an inward sentiment or consciousness, is, to the last degree, mysterious and unintelligible? Here the mind wills a certain event: Immediately, another event, unknown to ourselves, and totally different from that intended, is produc'd: This event produces another, equally unknown: Till at last, thro' a long succession, the desir'd event is produc'd. But if the original power were felt, it must be known: Were it known, its effect must also be known; since all power is relative to its effect. And *vice versa*, if the effect be not known, the power cannot be known or felt. How, indeed, can we be conscious of a power to move our limbs, when we have no such power; but only that to move certain animal spirits, which, tho' they produce at last the motion of our limbs, yet operate in such a manner as is altogether beyond our comprehension?

WE may, therefore, conclude from the whole; I hope, without any temerity, tho' with assurance; that our idea of power is not copy'd from any sentiment or consciousness of power within ourselves, when we give rise to animal motion, or apply our limbs to their proper use and office. That their motion follows the command of the will is a matter of common experience, like other natural events: But the power or energy, by which this is effected,

like that in other natural events, is unknown and inconceivable *.

SHALL we then aſſert, that we are conſcious of a power or energy in our own minds, when, by an act or command of our will, we raiſe up a new idea, fix the mind to a contemplation of it, turn it on all ſides, and at laſt diſmiſs it for ſome other idea, when we think, that we have ſurvey'd it with ſufficient accuracy? I believe the ſame arguments will prove, that even this command of the will gives us no real idea of force or energy.

Firſt, It muſt be allow'd, that when we know a power, we know that very circumſtance in the cauſe, by

* It may be pretended, that the reſiſtance, which we meet with in bodies, obliging us frequently to exert our force, and call up all our power; this gives us the idea of force, and power. 'Tis this *Niſus* or ſtrong endeavour, of which we are conſcious, that is the original impreſſion, from which this idea is copy'd. But, *firſt*, we attribute power to a vaſt number of objects, where we never can ſuppoſe this reſiſtance or exertion of force to take place: To the ſupreme Being, who never meets with any reſiſtance; to the mind in its command over its ideas and limbs, in common thinking and motion, where the effect follows immediately upon the will, without any exertion or ſummoning up of force; to inanimate matter, which is not capable of this ſentiment. *Secondly*, This ſentiment of an endeavour to overcome reſiſtance has no known connexion with any event: What follows it, we know by experience; but could not know it *à priori*. It muſt, however, be confeſſed, that the animal *Niſus*, which we experience, tho' it can afford no accurate, preciſe idea of power, enters very much into that *vulgar*, inaccurate idea, which is form'd of it. See p. 122.

by which it is enabled to produce the effect: For these are suppos'd to be synonimous. We must, therefore, know both the cause and effect, and the relation betwixt them. But do we pretend to be acquainted with the nature of the human soul and the nature of an idea, or the aptitude of the one to produce the other? This is a real creation; a production of something out of nothing: Which implies a power so great, that it may seem, at first sight, beyond the reach of any being, less than infinite. At least, it must be own'd, that such a power is not felt, nor known, nor even conceivable by the mind. We only feel the event, *viz.* the existence of an idea, consequent to a command of the will: But the manner, by which this operation is perform'd; the power, by which it is produc'd; is entirely beyond our comprehension.

Secondly, The command of the mind over itself is limited, as well as its command over the body; and these limits are not known by reason, or any acquaintance with the nature of the cause and effect; but only by experience and observation, as in all other natural events and in the operation of external objects. Our authority over our sentiments and passions is much weaker than that over our ideas; and even the latter authority is circumscrib'd within very narrow bounds. Will any one pretend to assign the ultimate reason of these limits, or show

why

why the power is deficient in one caſe and not in another?

Thirdly, This ſelf-command is very different at different times. A man in health poſſeſſes more of it, than one languiſhing with ſickneſs. We are more maſter of our thoughts in the morning than in the evening: Faſting, than after a full meal. Can we give any reaſon for theſe variations, except experience? Where then is the power, of which we pretend to be conſcious? Is there not here, either in a ſpiritual, or material ſubſtance, or both, ſome ſecret mechaniſm or ſtructure of parts, upon which the effect depends, and which, being altogether unknown to us, renders the power or energy of the will equally unknown and incomprehenſible?

VOLITION is ſurely an act of the mind, with which we are ſufficiently acquainted. Reflect upon it. Conſider it on all ſides. Do you find any thing in it like this creative power, by which it raiſes from nothing a new idea, and by a kind of FIAT, imitates the omnipotence of its maker, if I may be allow'd ſo to ſpeak, who call'd forth into exiſtence all the various ſcenes of nature? So far from being conſcious of this energy in the will, it requires as certain experience, as that of which we are poſſeſſed, to convince us, that ſuch extraordinary effects do ever reſult from a ſimple act of volition.

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THE generality of mankind never find any difficulty in accounting for the more common and familiar operations of nature; such as the descent of heavy bodies, the growth of plants, the generation of animals, or the nourishment of bodies by food; but suppose, that, in all these cases, they perceive the very force and energy of the cause, by which it is connected with its effect, and is for ever infallible in its operation. They acquire, by long habit, such a turn of mind, that, upon the appearance of the cause, they immediately expect with assurance its usual attendant, and hardly conceive it possible, that any other event could result from it. 'Tis only on the discovery of extraordinary phænomena, such as earthquakes, pestilence, and prodigies of any kind, that they find themselves at a loss to assign a proper cause, and to explain the manner, in which the effect is produc'd by it. 'Tis usual for men, in such difficulties, to have recourse to some invisible, intelligent principle (*a*), as the immediate cause of that event, which surprises them, and which, they think, cannot be accounted for from the common powers of nature. But philosophers, who carry their scrutiny a little farther, immediately perceive, that, even in the most familiar events, the energy of the cause is as unintelligible as in the most extraordinary and unusual, and that we only learn by experience the frequent

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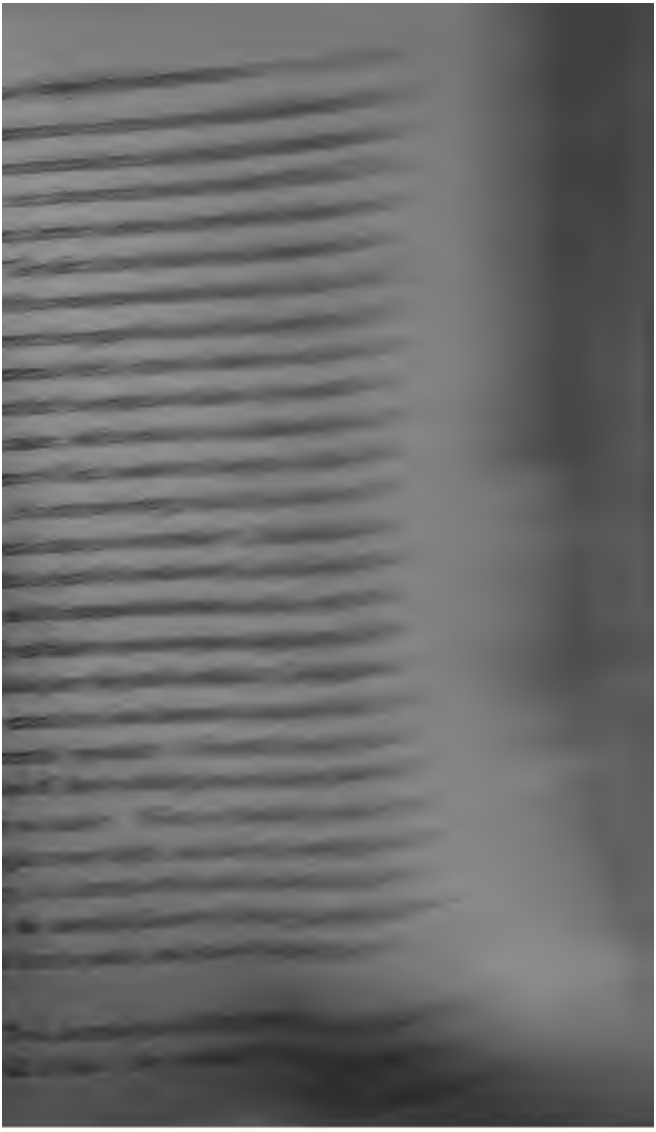

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on body, or of body on mind; nor are we able, either from our senses or consciousness, to assign the ultimate principle, in one case more than in the other. The same ignorance, therefore, reduces them to the same conclusion. They assert, that the Deity is the immediate cause of the union betwixt soul and body, and that they are not the organs of sense, which, being agitated by external objects, produce sensations in the mind; but that 'tis a particular volition of our omnipotent maker, which excites such a sensation, in consequence of such a motion in the organ. In like manner, it is not any energy in the will, that produces local motion in our members: 'Tis God himself, who is pleas'd to second our will, in itself impotent, and to command that motion, which we erroneously attribute to our own power and efficacy. Nor do philosophers stop at this conclusion. They sometimes extend the same inference to the mind itself, in its internal operations. Our mental vision or conception of ideas is nothing but a revelation made to us by our maker When we voluntarily turn our thoughts to any object, and raise up its image in the fancy; it is not the will, which creates that idea: 'Tis the universal Creator of all things, who discovers it to the mind, and renders it present to us.

THUS, according to these philosophers, every thing is full of God. Not contented with the principle, that

that nothing exists but by his will, that nothing possesses any power but by his concession: They rob nature, and all created beings of every power, in order to render their dependance on the Deity still more sensible and immediate. They consider not, that by this theory they diminish, instead of magnifying, the grandeur of those attributes, which they affect so much to celebrate. It argues surely more power in the Deity to delegate a certain degree of power to inferior creatures, than to operate every thing by his own immediate volition. It argues more wisdom to contrive at first the fabric of the world with such perfect foresight, that, of itself, and by its proper operation, it may serve all the purposes of providence, than if the great Creator were oblig'd every moment to adjust its parts, and animate by his breath all the wheels of that stupendous machine.

But if we would have a more philosophical confutation of this theory, perhaps the two following reflections may suffice.

First, It seems to me, that this theory, of the universal energy and operation of the supreme Being, is too bold ever to carry conviction with it to a man, who is sufficiently appriz'd of the weakness of human reason, and the narrow limits, to which it is confin'd in all its operations. Tho' the chain of arguments,

guments, which conduct to it, were ever so logical, there must arise a strong suspicion, if not an absolute assurance, that it has carry'd us quite beyond the reach of our faculties, when it leads to conclusions so extraordinary, and so remote from common life and experience. We are got into fairy-land, long ere we have reach'd the last steps of our theory; and *there* we have no reason to trust our common methods of argument, or think that our usual analogies and probabilities have any authority. Our line is too short to fathom such immense abysses. And however we may flatter ourselves, that we are guided in every step, which we take, by a kind of verisimilitude and experience; we may be assur'd, that this fancy'd experience has no authority when we thus apply it to subjects, that lie entirely out of the sphere of experience. But on this we shall have occasion to touch afterwards *.

Secondly, I cannot perceive any force in the arguments, on which this theory is founded. We are ignorant, 'tis true, of the manner, in which bodies operate on each other: Their force or energy is entirely incomprehensible. But are we not equally ignorant of the manner or force, by which a mind, even the supreme mind, operates either on itself or on body? Whence, I beseech you, do we acquire any

* Essay XII.

any idea of it? We have no ſentiment or conſciouſneſs of this power in ourſelves: We have no idea of the ſupreme Being but what we learn from reflection on our own faculties. Were our ignorance, therefore, a good reaſon for rejecting any thing, we ſhould be led into that principle of denying all energy in the ſupreme Being as much as in the groſſeſt matter. We ſurely comprehend as little the operations of one as of the other. Is it more difficult to conceive, that motion may ariſe from impulſe, than that it may ariſe from volition? All we know is our profound ignorance in both caſes †.

PART

† I need not examine at length the *vis inertiæ* which is ſo much talk'd of in the new philoſophy, and which is aſcrib'd to matter. We find by experience, that a body at reſt or in motion continues for ever in its preſent ſtate, till pull'd from it by ſome new cauſe: And that a body impell'd takes as much motion from the impelling body as it acquires itſelf. Theſe are facts. When we call this a *vis inertiæ*, we only mark theſe facts, without pretending to have any idea of the inert power; in the ſame manner as when we talk of gravity, we mean certain effects, without comprehending that active power. It was never the meaning of ſir *Iſaac Newton* to rob ſecond cauſes of all force or energy; tho' ſome of his followers have endeavour'd to eſtabliſh that theory upon his authority. On the contrary that great philoſopher had recourſe to an etherial active fluid to explain his univerſal attraction; tho' he was ſo cautious and modeſt as to allow, that it was a mere hypotheſis, not to be inſiſted on, without more experiments. I muſt confeſs, that there is ſomething in the fate of opinions a little extraordinary. *Des-Cartes* inſinuated that doctrine of the univerſal and ſole efficacy of the deity, without inſiſting on it. *Malebranche* and other *Cartesians* made it the foundation of all their philoſophy. It had, how-

PART II.

BUT to hasten to a conclusion of this argument, which is already drawn out to too great a length: We have sought, in vain, for an idea of power or necessary connexion in all the sources, from which we could suppose it to be deriv'd. It appears, that, in single instances of the operation of bodies, we never can, by our utmost scrutiny, discover any thing but one event following another; without being able to comprehend any force or power, by which the cause operates, or any connexion betwixt it and its suppos'd effect. The same difficulty occurs in contemplating the operations of mind on body; where we observe the motion of the latter to follow upon the volition of the former; but are not able to observe nor conceive the tye, which binds together the motion and volition, or the energy, by which the mind produces this effect. The authority of the will over our own faculties and ideas is not a whit more comprehensible: So that upon the whole, there appears not, thro' all nature, any one instance of connexion, which is conceivable by us. All events seem entirely loose and separate. One event follows another;

however, no authority in *England*. *Locke*, *Clarke*, and *Cudworth*, never so much as take notice of it, but supposed all along, that matter has a real, tho' subordinate and deriv'd power. By what means has it become so prevalent among our *modern metaphysicians*?

ther; but we never can obſerve any tye betwixt them. They ſeem *conjoin'd*, but never *connected*. And as we can have no idea of any thing, which never appear'd to our outward ſenſe or inward ſentiment, the neceſſary concluſion *ſeems* to be, that we have no idea of connexion or power at all, and that theſe words are abſolutely without any meaning, when employ'd either in philoſophical reaſonings, or common life.

But there ſtill remains one method of avoiding this concluſion, and one ſource, which we have not yet examin'd. When any natural object or event is preſented, 'tis impoſſible for us, by any ſagacity or penetration, to diſcover, or even conjecture, without experience, what event will reſult from it, or to carry our foreſight beyond that object, which is immediately preſent to the memory and ſenſes. Even after one inſtance or experiment, where we have obſerv'd a particular event to follow upon another, we are not intitled to form a general rule, or foretel what will happen in like caſes; it being juſtly eſteem'd an unpardonable temerity to judge of the whole courſe of nature from one ſingle experiment, however accurate or certain. But when one particular ſpecies of event has always, in all inſtances, been conjoin'd with another, we make no longer *any* ſcruple to foretel the one upon the appearance of the

the other, and to employ that reasoning, which can alone assure us of any matter of fact or existence. We then call the one object, *Cause*; and the other, *Effect*. We suppose, that there is some connexion betwixt them; some power in the one, by which it infallibly produces the other, and operates with the greatest certainty and strongest necessity.

IT appears, then, that this idea of a necessary connexion amongst events arises from a number of similar instances, which occur, of the constant conjunction of these events; nor can that idea ever be suggested by any one of these instances, survey'd in all possible lights and positions. But there is nothing in a number of instances, different from every single instance, which is suppos'd to be exactly similar; except only, that after a repetition of similar instances, the mind is carry'd by habit, upon the appearance of one event, to expect its usual attendant, and to believe, that it will exist. This connexion, therefore, which we *feel* in the mind, or customary transition of the imagination from one object to its usual attendant, is the sentiment or impression, from which we form the idea of power or necessary connexion. Nothing farther is in the case. Contemplate the subject on all sides, you will never find any other origin of this idea. This is the sole difference betwixt one instance, from which we never can receive the idea

of

of connexion, and a number of ſimilar inſtances, by which it is ſuggeſted. The firſt time a man ſaw the communication of motion by impulſe, as by the ſhock of two billiard-balls, he could not pronounce that the one event was *connected*; but only that it was *conjoin'd* with the other. After he has obſerv'd ſeveral inſtances of this nature, he then pronounces them to be *connected*. What alteration has happen'd to give riſe to this new idea of *connexion?* Nothing but that he now *feels* theſe events to be *connected* in his imagination, and can readily foretel the exiſtence of one from the appearance of the other. When we ſay, therefore, that one object is connected with another, we mean only, that they have acquir'd a connexion in our thoughts, and give riſe to this inference, by which they become proofs of each other's exiſtence. A concluſion, which is ſomewhat extraordinary; but which ſeems founded on ſufficient evidence. Nor will its evidence be weakned by any general diffidence of the underſtanding, or ſceptical ſuſpicion concerning every concluſion, which is new and extraordinary. No concluſions can be more agreeable to ſcepticiſm than ſuch as make diſcoveries concerning the weakneſs and narrow limits of human reaſon and capacity.

And what ſtronger inſtance can be produc'd of the ſurprizing ignorance and weakneſs of the underſtanding,

To recapitulate, therefore, the reasonings of this ssay: Every idea is copy'd from some preceding impression or sentiment; and where we cannot find any npression, we may be certain that there is no idea. In ll single instances of the operation of bodies or minds, here is nothing that produces any impression, nor onsequently can suggest any idea, of power or necessary connexion. But when many uniform instances ppear, and the same object is always follow'd by he same event; we then begin to entertain the notion of cause and connexion. We then *feel* a new sentiment or impression, *viz.* a customary connexion

fects in equal or unequal times; but by a direct mensuration and comparison.

As to the frequent use of the words, Force, Power, Energy, *&c.* which every where occur in common conversation, as well as in philosophy; that is no proof, that we are acquainted, in any instance, with the connecting principle betwixt cause and effect, or can account ultimately for the production of one thing by another. These words, as commonly us'd, have very loose meanings, annex'd to them; and their ideas are very uncertain and confus'd. No animal can put external bodies in motion without the sentiment of a *Nisus* or endeavour; and every animal has a sentiment or feeling from the stroke or blow of an external object, that is in motion. These sensations, which are merely animal, and from which we can *à priori* draw no inference, we are apt to transfer to inanimate objects, and to suppose, that they have some such feelings, whenever they transfer or receive motion. With regard to energies, which are exerted, without our annexing to them any idea of communicated motion, we consider only the constant experienc'd conjunction of the events; and as we *feel* a customary connexion betwixt the ideas, we transfer that feeling to the objects; as nothing is more usual than to apply to external bodies every internal sensation, which they occasion.

in the thought or imagination betwixt one ol
its usual attendant; and this sentiment is the
of that idea which we seek for. For as t
arises from a number of similar instances,
from any single instance; it must arise from
cumstance, in which the number of instanc
from every individual instance. But this ci
connexion or transition of the imagination is
circumstance, in which they differ. In eve
particular they are alike. The first instanc
we saw of motion, communicated by the f
two billiard balls (to return to this obvious i
is exactly similar to any instance that may, at
occur to us; except only, that we could
first, *infer* one event from the other; whicl
enabled to do at present, after so long a c
uniform experience. I know not, if the rea
readily apprehend this reasoning. I am afra
should I multiply words about it, or throw
greater variety of lights, it would only beco
obscure and intricate. In all abstract rea
there is one point of view, which, if we can
hit, we shall go farther towards illustrating t
ject, than by all the eloquence and copious ex
in the world. This we should endeavour to
and reserve the flowers of rhetoric for subjects
are more adapted to them.

ESSAY VIII.

Of LIBERTY *and* NECESSITY.

PART I.

'T might reaſonably be expected, in queſtions, which have been canvaſs'd and diſputed with eat eagerneſs ſince the firſt origin of ſcience and ilofophy, that the meaning of all the terms, at ift, ſhould have been agreed upon among the diſtants; and our enquiries, in the courſe of two ouſand years, been able to paſs from words to the ne and real ſubject of the controverſy. For how ſy may it ſeem to give exact definitions of the rms employ'd in reaſoning, and make theſe defitions, not the mere ſound of words, the object of ture ſcrutiny and examination? But if we conſider e matter more narrowly, we ſhall be apt to draw a uite oppoſite concluſion. From that circumſtance lone, that a controverſy has been long kept on foot,

and remains ſtill undecided, we may preſume, that there is ſome ambiguity in the expreſſion, and that the diſputants affix different ideas to the terms employ'd in the controverſy. For as the faculties of the ſoul are ſuppos'd to be naturally alike in every individual; otherwiſe nothing could be more fruitleſs than to reaſon or diſpute together; 'twere impoſſible, if men affix the ſame ideas to their terms, that they could ſo long form different opinions of the ſame ſubject; eſpecially when they communicate their views, and each party turn themſelves on all ſides, in ſearch of arguments, which may give them the victory over their antagoniſts. 'Tis true; if men attempt the diſcuſſion of queſtions, which lie entirely beyond the reach of human capacity, ſuch as thoſe concerning the origin of worlds, or the œconomy of the intellectual ſyſtem or region of ſpirits, they may long beat the air in their fruitleſs conteſts, and never arrive at any determinate concluſion. But if the queſtion regard any ſubject of common life and experience; nothing, one would think, could preſerve the diſpute ſo long undecided, but ſome ambiguous expreſſions, which keep the antagoniſts ſtill at a diſtance, and hinder them from grappling with each other.

This has been the caſe in the long diſputed queſtion concerning liberty and neceſſity; and to ſo remarkable

narkable a degree, that, if I be not much mistaken, we shall find all mankind, both learned and ignorant, to have been always of the same opinion with regard to that subject, and that a few intelligible definitions would immediately have put an end to the whole controversy. I own, that this dispute has been so much canvass'd on all hands, and has led philosophers into such a labyrinth of obscure sophistry, that 'tis no wonder, if a sensible and polite reader indulge his ease so far as to turn a deaf ear to the proposal of such a question, from which he can expect neither instruction nor entertainment. But the state of the argument here proposed may, perhaps, serve to renew his attention; as it has more novelty, promises, at least, some decision of the controversy, and will not much disturb his ease, by any intricate or obscure reasoning.

I HOPE, therefore, to make appear, that all men have ever agreed in the doctrines both of necessity and of liberty, according to any reasonable sense, which can be put on these expressions; and that the whole controversy has hitherto turn'd merely upon words. We shall begin with examining the doctrine of necessity.

'TIS universally allow'd, that matter, in all its operations, is actuated by a necessary force, and that

every effect is so precisely determin'd by the nature and energy of its cause, that no other effect, in such particular circumstances, could possibly have resulted from the operation of that cause. The degree and direction of every motion is, by the laws of nature, prescrib'd with such exactness, that a living creature may as soon arise from the shock of two bodies, as motion in any other degree or direction, than what is actually produc'd by it. Would we, therefore, form a just and precise idea of *necessity*, we must consider, whence that idea arises, when we apply it to the operation of bodies.

It seems evident, that, if all the scenes of nature were shifted continually in such a manner, that no two events bore any resemblance to each other, but every object was entirely new, without any similitude to whatever had been seen before, we should never, in that case, have attain'd the least idea of necessity, or of a connexion amongst these objects. We might say, upon such a supposition, that one object or event has follow'd another; not that one was produc'd by the other. The relation of cause and effect must be utterly unknown to mankind Inference and reasoning concerning the operations of nature would, from that moment, be at an end; and the memory and senses remain the only canals, by which the knowlege of any real existence could possibly have access

acceſs to the mind. Our idea, therefore, of neceſſity and cauſation ariſes entirely from that uniformity, obſervable in the operations of nature; where ſimilar objects are conſtantly conjoin'd together, and the mind is determin'd by cuſtom to infer the one from the appearance of the other. Theſe two circumſtances form the whole of that neceſſity, which we aſcribe to matter. Beyond the conſtant *conjunction* of ſimilar objects, and the conſequent *inference* from one to the other, we have no notion of any neceſſity or connexion.

IF it appear, therefore, that all mankind have ever allow'd, without any doubt or heſitation, that theſe two circumſtances take place in the voluntary actions of men, and in the operations of the mind; it muſt follow, that all mankind have ever agreed in the doctrine of neceſſity, and that they have hitherto diſputed, merely for not underſtanding each other.

As to the firſt circumſtance, the conſtant and regular conjunction of ſimilar events; we may poſſibly ſatisfy ourſelves by the following conſiderations. It is univerſally acknowleg'd, that there is a great uniformity amongſt the actions of men, in all nations and ages, and that human nature remains ſtill the ſame, in its principles and operations. The ſame motives produce always the ſame actions: The ſame

events follow from the ſame cauſes. Ambition, avarice, ſelf-love, vanity, friendſhip, generoſity, public ſpirit; theſe paſſions, mix'd in various degrees, and diſtributed thro' ſociety, have been, from the beginning of the world, and ſtill are, the ſources of all the actions and enterprizes, which have ever been obſerv'd amongſt mankind. Would you know the ſentiments, inclinations, and courſe of life of the *Greeks* and *Romans?* Study well the temper and actions of the *French* and *Engliſh*. You cannot be much miſtaken in transferring to the former moſt of the obſervations, which you have made with regard to the latter. Mankind are ſo much the ſame, in all times and places, that hiſtory informs us of nothing new or ſtrange in this particular. Its chief uſe is only to diſcover the conſtant and univerſal principles of human nature, by ſhewing men in all varieties of circumſtances and ſituations, and furniſhing us with materials, from which we may form our obſervations, and become acquainted with the regular ſprings of human action and behaviour. Theſe records of wars, intrigues, factions, and revolutions, are ſo many collections of experiments, by which the politician or moral philoſopher fixes the principles of his ſcience; in the ſame manner as the phyſician or natural philoſopher becomes acquainted with the nature of plants, minerals, and other external objects, by the experiments, which he forms concerning them. Nor

are

are the earth, water, and other elements, examin'd by *Aristotle*, and *Hippocrates*, more like to those, which at present lie under our observation, than the men, describ'd by *Polybius* and *Tacitus*, are to those who now govern the world.

SHOULD a traveller returning from a far country, bring us an account of men, entirely different from any, with whom we were ever acquainted; men, who were entirely divested of avarice, ambition, or revenge; who knew no pleasure but friendship, generosity, and public spirit; we should immediately, from these circumstances, detect the falshood, and prove him a liar, with the same certainty as if he had stuff'd his narration with stories of centaurs and dragons, miracles and prodigies. And if we would explode any forgery in history, we cannot make use of a more convincing argument, than to prove, that the actions, ascrib'd to any person, are directly contrary to the course of nature, and that no human motives, in such circumstances, could ever induce him to such a conduct. The veracity of *Quintus Curtius* is as suspicious, when he describes the supernatural courage of *Alexander*, by which he was hurry'd on singly to attack multitudes, as when he describes his supernatural force and activity, by which he was able to resist them. So readily and universally do we acknowlege a uniformity in human motives and actions as well as in the operations of body.

Hence likewise the benefit of that exper
acquir'd by long life and a variety of busine
company, in order to instruct us in the princi
human nature, and regulate our future condu
well as speculation. By means of this guid
[illegible] to the knowlege of mens inclin
[illegible] from their actions, expressions,
[illegible]; and again, descend to the inter
[illegible] actions from the knowlege of
[illegible] inclinations. The general observa
[illegible] by a course of practice and exper
[illegible] clue of human nature, and teach
[illegible] its labyrinths and intricacies. Pr
[illegible]ances no longer deceive us. Publi
[illegible] pass for the specious colouring of a
[illegible] virtue and honour be allow'd their p
[illegible] authority, that perfect disintereste
[illegible]retended, is never expected in multi
[illegible]s; seldom in their leaders; and se
[illegible]dividuals of any rank or station. But
[illegible] uniformity in human actions, and
[illegible] experiment which we could form of this
[illegible]lar and anomolous, it were impossible to c
[illegible] general observations concerning mankind;
[illegible]lence, however accurately digested
[illegible]uld ever serve to any purpose. W
[illegible]husbandman more skilful in his c
[illegible]oung beginner, but because there is

tain uniformity in the operation of the ſun, rain, and earth, towards the production of vegetables; and experience teaches the old practitioner the rules, by which this operation is govern'd and directed?

WE muſt not, however, expect, that this uniformity of human actions ſhould be carry'd ſuch a length, as that all men in the ſame circumſtances, ſhould always act preciſely in the ſame manner, without any allowance for the diverſity of characters, prejudices, and opinions. Such a uniformity, in every particular, is found in no part of nature. On the contrary, from obſerving the variety of conduct and behaviour in different men, we are enabled to form a greater variety of rules and maxims, which ſtill ſuppoſe a degree of uniformity and regularity.

ARE the manners of men different in different ages and countries? We learn thence the great force of cuſtom and education, which mould the human mind from its infancy, and form it into a fix'd and eſtabliſh'd character. Is the behaviour and conduct of the one ſex very unlike that of the other? 'Tis from thence we become acquainted with the different characters, which nature has impreſs'd upon the ſexes, and which ſhe preſerves with conſtancy and regularity. Are the actions of the ſame perſon much diverſify'd in the different periods of his life, from infancy to old

age?

age? This affords room for many general obſervations concerning the gradual change of our ſentiments and inclinations, and the different maxims, which prevail in the different ages of human creatures. Even the characters which are peculiar to each individual, have a conſtancy and uniformity in their influence, otherwiſe our acquaintance with the perſons, and our obſervation of their conduct could never teach us their diſpoſitions, nor ſerve to direct our behaviour with regard to them.

I GRANT it poſſible to find ſome actions, which ſeem to have no regular or uniform connexion with any known motives, and are exceptions to all the meaſures of conduct, which have ever been eſtabliſh'd for the government of men. But if we would willingly know, what judgment ſhould be form'd of ſuch irregular and extraordinary actions; we may conſider the ſentiments that are commonly entertain'd with regard to thoſe irregular events, which appear in the courſe of nature, and the operations of external objects. All cauſes are not conjoin'd to their uſual effects, with like conſtancy and uniformity. An artificer, who handles only dead matter, may be diſappointed of his ſcope and aim as well as the politician, who directs the conduct of ſenſible and intelligent agents.

THE

THE vulgar, who take things according to their firſt appearance, attribute the uncertainty of events to ſuch an uncertainty in the cauſes as makes the latter often fail of their uſual influence; tho' they meet with no obſtacle nor impediment in their operation. But philoſophers, obſerving, that almoſt in every part of nature there is contain'd a vaſt variety of ſprings and principles, which are hid, by reaſon of their minuteneſs or remoteneſs, find, that 'tis at leaſt poſſible the contrariety of events may not proceed from any contingency in the cauſe, but from the ſecret operation of contrary cauſes. This poſſibility is converted into certainty by farther obſervation, when they remark, that, upon an exact ſcrutiny, a contrariety of effects always betrays a contrariety of cauſes, and proceeds from their mutual hindrance and oppoſition. A peaſant can give no better reaſon for the ſtopping of any clock or watch than to ſay that it commonly does not go right: But an artizan eaſily perceives, that the ſame force in the ſpring or pendulum has always the ſame influence on the wheels; but fails of its uſual effect, perhaps by reaſon of a grain of duſt, which puts a ſtop to the whole movement. From the obſervation of ſeveral parallel inſtances, philoſophers form a maxim, that the connexion betwixt all cauſes and effects is equally neceſſary, and that its ſeeming uncertainty in ſome in-

ſtances

[illegible] from the secret oppofition of [illegible] caufes

[illegible] for inftance, in the human body, whe[illegible] of health or ficknefs difappoi[illegible] medicines operate not with[illegible] events follow [illegible] the philofopher and phy[illegible] men, nor are ever te[illegible] the neceffity and uniform[illegible] which the animal econo[illegible] know, that a human bod[illegible] machine: That many [illegible] which are altogether beyo[illegible] That to us it muft often appea[illegible] its operations: And that therefo[illegible] events, which outwardly difcover [illegible] can be no proof, that the laws of natu[illegible] obfer'd with the greateft ftrictnefs and r[illegible] its internal operations and government.

The philofopher, if he be conftftent, muft [illegible] the fame reafonings to the actions and volitio[illegible] intelligent agents. The moft irregular and [illegible]ecred refolutions of men may frequently b[illegible] counted for by thofe who know every particul[illegible] cumftance of their character and fituation. A[illegible] of an obliging difpofition gives a peevifh a[illegible]

but he has the tooth-ake, or has not din'd. A ſtupid fellow diſcovers an uncommon alacrity in his carriage: But he has met with a ſudden piece of good-fortune. Or even when an action, as ſometimes happens, cannot be particularly accounted for, either by the perſon himſelf or by others; we know, in general, that the characters of men are, to a certain degree, inconſtant and irregular. This is, in a manner, the conſtant character of human nature; tho' it be applicable, in a more particular manner, to ſome perſons, who have no fix'd rule for their conduct, but proceed in a continu'd courſe of caprice and inconſtancy. The internal principles and motives may operate in a uniform manner, notwithſtanding theſe ſeeming irregularities; in the ſame manner as the winds, rain, clouds, and other variations of the weather are ſuppos'd to be govern'd by ſteady principles; tho' not eaſily diſcoverable by human ſagacity and enquiry.

THUS it appears, not only that the conjunction betwixt motives and voluntary actions is as regular and uniform, as that betwixt the cauſe and effect in any part of nature; but alſo that this regular conjunction has been univerſally acknowleg'd amongſt mankind, and has never been the ſubject of diſpute, either in philoſophy or common life. Now as it is from paſt experience, that we draw all inferences concerning

concerning the future, and as we conclude, that objects will always be conjoin'd together, which we find always to have been conjoin'd; it may seem superfluous to prove, that this experienc'd uniformity in human actions is the source of all the *inferences*, which we form concerning them. But in order to throw the argument into a greater variety of lights, we shall also insist, tho' briefly, on this latter topic.

The mutual dependance of men is so great, in all societies, that scarce any human action is entirely compleat in itself, or is perform'd without some reference to the actions of others, which are requisite to make it answer fully the intention of the agent. The poorest artificer, who labours alone, expects at least the protection of the magistrate, to ensure the enjoyment of the fruits of his labour. He also expects, that, when he carries his goods to market, and offers them at a reasonable price, he shall find buyers; and shall be able, by the money he acquires, to engage others to supply him with those commodities, which are requisite for his subsistence. In proportion as mens dealings are more extensive, and their intercourse with others more complicated, they always comprehend, in their schemes of life, a greater variety of voluntary actions, which they expect, from their proper motives, to co-operate with their own. In all these conclusions, they take their measures

ſures from paſt experience, in the ſame manner as in their reaſonings concerning external objects; and firmly believe, that men, as well as all the elements, are to continue, in their operations, the ſame, which they have ever found them. A manufacturer reckons upon the labour of his ſervants, for the execution of any work, as much as upon the tools, which he employs, and would be equally ſurpriz'd, in the one caſe, were his expectations diſappointed, as in the other. In ſhort, this experimental inference and reaſoning concerning the actions of others enters ſo much into human life, that no man, while awake, is ever a moment without employing it. Have we not reaſon, therefore, to affirm, that all mankind have always agreed in the doctrine of neceſſity, according to the foregoing definition and explication of it?

NOR have philoſophers ever entertain'd a different opinion from the people in this particular. For not to mention, that almoſt every action of their life ſuppoſes that opinion; there are even few of the ſpeculative parts of learning, to which it is not eſſential. What would become of *hiſtory*, had we not a dependance on the veracity of the hiſtorian, according to the experience, which we have had of mankind? How could *politics* be a ſcience, if laws and forms of government had not a uniform and regular influence upon ſociety? Where would be the foundation of

morals,

morals, if particular characters had no certai
terminate power to produce particular fe
and if these sentiments had no constant ope
actions? And with what pretext could w
our *criticism* upon any poet or polite auth
could not pronounce the conduct and senti
his actors, either natural or unnatural, to fi
racters, and in such circumstances? It seem
impossible, therefore to engage, either in f
action of any kind, without acknowleging
trine of necessity, and this *inference* from m
voluntary actions; from characters to condu

And indeed, when we consider how aptl
and *moral* evidence link together, and fo
one chain of argument, we shall make no s
allow, that they are of the same nature,
riv'd from the same principles. A prison
has neither money nor interest, discovers th
sibility of his escape, as well from the
of the goaler, as from the walls and b
which he is surrounded; and in all attemp
freedom, chuses rather to work upon the
iron of the one, than upon the inflexible
the other. The same prisoner, when con
the scaffold, foresees his death as certainly
constancy and fidelity of his guards, as from
ration of the ax or wheel. His mind run

ertain train of ideas: The refusal of the soldiers o consent to his escape; the action of the executioner; the separation of the head and body; bleeding, convulsive motions, and death. Here is a connected chain of natural causes and voluntary actions; but the mind feels no difference betwixt them, in passing from one link to another: Nor is less certain of the future event than if it were connected with the objects present to the memory or senses, by a train of causes, cemented together by what we are pleas'd to call a *physical* necessity. The same experienc'd union has the same effect on the mind, whether the united objects be motives, volitions, and actions; or figure and motion. We may change the names of things; but their nature and their operation on the understanding never change.

I have frequently consider'd, what could possibly be the reason, why all mankind, tho' they have ever, without hesitation, acknowleg'd the doctrine of necessity, in their whole practice and reasoning, have yet discover'd such a reluctance to acknowlege it in words, and have rather shewn a propensity, in all ages, to profess the contrary opinion. The matter, I think, may be accounted for, after the following manner. If we examine the operations of bodies and the production of effects from their causes, we shall find, that all our faculties can never carry

no farther in our knowlege of this relation, than merely to observe, that particular objects are *constantly* conjoin'd together, and that the mind is carry'd, by a *customary transition*, from the appearance of the one to the belief of the other. But tho' this conclusion concerning human ignorance be the result of the strictest scrutiny and examination of this subject, men still entertain a strong propensity to believe, that they penetrate farther into the powers of nature, and perceive something like a necessary connexion betwixt the cause and the effect. When again they turn their reflections toward the operations of their own minds, and *feel* no such connexion of the motive and the action; they are apt, from thence, to imagine, that there is a difference betwixt the effects, resulting from material and brute force, and those which arise from thought and intelligence. But being once convinc'd, that we know nothing farther of causation of any kind, than merely the *constant conjunction* of objects, and the consequent *inference* of the mind from one to another, and finding, that these two circumstances are universally acknowleg'd to have place in voluntary actions; we may thence be more easily led to own the same necessity common to all causes. And tho' this reasoning may contradict the systems of many philosophers, in ascribing necessity to the determinations of the will, we shall find, upon reflection, that they dissent from it in words only.

nly, not in their real ſentiments. Neceſſity, according to the ſenſe, in which it is here taken, has never yet been rejected, nor can ever, I think, be rejected, by any philoſopher. It may only, perhaps, be pretended, that the mind can perceive, in the operations of matter, ſome farther connexion betwixt the cauſe and effect; and a connexion, which has not place in the voluntary actions of intelligent beings. Now whether it be ſo or not, can only appear upon examination; and it is incumbent on theſe philoſophers to make good their aſſertion, by defining or deſcribing that neceſſity, and pointing it out to us, in the operations of material cauſes.

IT would ſeem, indeed, that men begin at the wrong end of this queſtion concerning liberty and neceſſity, when they enter upon it by examining the faculties of the ſoul, the influence of the underſtanding, and the operations of the will. Let them firſt diſcuſs a more ſimple queſtion, *viz.* the operations of body and of brute unintelligent matter; and try whether they can there form any idea of cauſation and neceſſity, except that of a conſtant conjunction of objects, and ſubſequent inference of the mind from one to another. If theſe circumſtances form, in reality, the whole of that neceſſity, which we can conceive in matter, and if theſe circumſtances be alſo univerſally acknowleg'd to take place in the operations of the mind, the diſpute is at an end; or, at

leaſt, muſt be own'd to be thenceforth merely verbal. But as long as we will raſhly ſuppoſe, that we have ſome farther idea of neceſſity and cauſation in the operations of external objects; at the ſame time, that we can find nothing farther, in the voluntary actions of the mind; there is no poſſibility of bringing the diſpute to any determinate iſſue, while we proceed upon ſo erroneous a ſuppoſition. The only method of undeceiving us, is, to mount up higher; to examine the narrow extent of our ſcience, when apply'd to material cauſes; and to convince ourſelves, that all we know of them, is, the conſtant conjunction and inference above-mention'd. We may, perhaps, find, that 'tis with difficulty we are induc'd to fix ſuch narrow limits to human underſtanding: But we can afterwards find no difficulty, when we come to apply this doctrine to the actions of the will. For as 'tis evident, that theſe have a regular and conſtant conjunction with motives and circumſtances and characters, and as we always draw inferences from the one to the other, we muſt be oblig'd to acknowledge, in words, that neceſſity, which we have already avow'd, in every deliberation and reflection of our lives, and in every ſtep of our conduct and behaviour.*

But

* The prevalence of the doctrine of liberty may be accounted for, from another cauſe, *viz.* a falſe ſenſation or ſeeming experience which we have, or may have of liberty or

to proceed in this reconciling project with re-
o the question of liberty and necessity; the
ontentious question, of metaphysics, the most
tious science; it will not require many words

ference, in many of our actions. The necessity of
on, whether of matter or of mind, is not, properly
g, a quality in the agent, but in any thinking or
nt being, who may consider the action; and it con-
sisty in the determination of his thought to infer the
e of that action from some preceding objects; as li-
when oppos'd to necessity, is nothing but the want of
termination, and a certain looseness or indifference,
we feel, in passing or not passing, from the idea of
ject to that of any succeeding one. Now we may
, that, tho' in *reflecting* on human actions we seldom
h a looseness or indifference, but are commonly able
r them with considerable certainty from their motives,
om the dispositions of the agent; yet it frequently
s, that, in *performing* the actions themselves, we are
of something like it: And as all resembling objects
dily taken for each other, this has been employ'd as
nstrative and even an intuitive proof of human li-
We feel, that our actions are subject to our will, on
ccasions; and imagine we feel, that the will itself is
to nothing, because, when by a denial of it we are
:'d to try, we feel that it moves easily every way, and
es an image of itself, (or a *Velleity*, as it is call'd in
ools) even on that side, on which it did not settle.
mage, or faint motion, we persuade ourselves, could,
t time, have been compleated into the thing itself;
e, should that be deny'd, we find, upon a second
hat, at present, it can. We consider not, that the fan-
l desire of shewing liberty is here the motive of our
s. And it seems certain, that however we may ima-
e feel a liberty within ourselves, a spectator can com-
infer our actions from our motives and character;
ren where he cannot, he concludes in general, that he
, were he perfectly acquainted with every circumstance
situation and temper, and the most secret springs of
mplexion and disposition. Now this is the very es-
of necessity, according to the foregoing doctrine.

to prove, that all mankind have ever agreed in doctrine of liberty as well as in that of necessity, that the whole dispute, in this respect also, has b hitherto merely verbal. For what is meant by lib ty, when apply'd to voluntary actions? We can surely mean, that actions have so little connexion w motives, inclinations, and circumstances, that the does not follow with a certain degree of uniform from the other, and that the one affords no inferen from which we can conclude the existence of other. For these are plain and acknowleged m ters of fact. By liberty, then, we can only me *a power of acting or not acting, according to the det minations of the will*; that is, if we chuse to rem at rest, we may; if we chuse to move, we also m Now this hypothetical liberty is universally allow to belong to every body, who is not a prisoner a in chains. Here then is no subject of dispute.

WHATEVER definition we may give of liberty, should be careful to observe two requisite circu stances; *first*, that it be consistent with plain matt of fact; *secondly*, that it be consistent with itself. we observe these circumstances, and render our de nition intelligible, I am persuaded that all mankin will be found of one opinion with regard to it.

'TIS universally allow'd, that nothing exists wit out a cause of its existence, and that chance, wh

ſtrictly examin'd, is a mere negative word, and means not any real power, which has, any where, a being in nature. But 'tis pretended that ſome cauſes are neceſſary, and ſome are not neceſſary. Here then is the admirable advantage of definitions. Let any one *define* a cauſe, without comprehending, as a part of the definition, a *neceſſary connexion* with its effect; and let him ſhew diſtinctly the origin of the idea, expreſs'd by the definition; and I ſhall frankly give up the whole controverſy. But if the foregoing explication of the matter be receiv'd, this muſt be abſolutely impracticable. Had not objects a regular and conſtant conjunction with each other, we ſhould never have entertain'd any notion of cauſe and effect; and this conſtant conjunction produces that inference of the underſtanding, which is the only connexion, that we can have any comprehenſion of. Whoever attempts a definition of cauſe, excluſive of theſe circumſtances, will be oblig'd, either to employ unintelligible terms, or ſuch as are ſynonimous to the term, which he endeavours to define*. And if the definition above-mention'd, be admitted; liber-

* Thus if a cauſe be defin'd, *that which produces any thing*; 'tis eaſy to obſerve, that *producing* is ſynonimous to *cauſing*. In like manner, if a cauſe be defin'd, *that by which any thing exiſts*; this is liable to the ſame objection. For what is meant by theſe words, *by which?* Had it been ſaid, that a cauſe is *that* after which *any thing conſtantly exiſts*; we ſhould have underſtood the terms. For this is, indeed, all we know of the matter. And this conſtancy forms the very eſſence of *neceſſity, nor have we* any other idea of it.

ty, when oppos'd to necessity, not to constraint, is the same thing with chance; which is universally allow'd to have no existence.

PART II.

There is no method of reasoning more common, and yet none more blameable, than in philosophical debates, to endeavour the refutation of any hypothesis, by a pretext of its dangerous consequences to religion and morality. When any opinion leads into absurdities, 'tis certainly false; but 'tis not certain that an opinion is false, because 'tis of dangerous consequence. Such topics, therefore, ought entirely to be forborne, as serving nothing to the discovery of truth, but only to make the person of an antagonist odious. This I observe in general, without pretending to draw any advantage from it. I submit frankly to an examination of this kind, and shall venture to affirm, that the doctrines, both of necessity and of liberty, as above explain'd, are not only consistent with morality and religion, but are absolutely essential to the support of them.

Necessity may be defin'd two ways, conformable to the two definitions of *cause*, of which it makes an essential part. It consists either in the constant on and conjunction of like objects, or in the in- nce of the understanding from one object to an-

other. Now neceſſity, in both theſe ſenſes, (which, indeed, are, at bottom, the ſame) has univerſally, tho' tacitly, in the ſchools, in the pulpit, and in common life, been allow'd to belong to the will of man; and no one has ever pretended to deny, that we can draw inferences concerning human actions, and that thoſe inferences are founded in the experienc'd union of like actions, with like motives, inclinations, and circumſtances. The only particular, in which any one can differ, is, that either, perhaps, he will refuſe to give the name of neceſſity to this property of human actions: But as long as the meaning is underſtood, I hope the word can do no harm: Or that he will maintain it poſſible to diſcover ſomething farther in the operations of matter. But this, it muſt be acknowleg'd, can be of no conſequence to morality or religion, whatever it may be to natural philoſophy or metaphyſics. We may here be miſtaken in aſſerting, that there is no idea of any other neceſſity or connexion in the actions of body: But ſurely we aſcribe nothing to the actions of the mind, but what every one does, and muſt readily allow of. We change no circumſtance in the receiv'd orthodox ſyſtem with regard to the will, but only in that with regard to material objects and cauſes. Nothing therefore can be more innocent, at leaſt, than this doctrine.

All laws being founded in rewards and punishments, 'tis suppos'd as a fundamental principle, that these motives have a regular and uniform influence on the mind, and both produce the good and prevent the evil actions. We may give to this influence, what name we please; but as 'tis usually conjoin'd with the action, it must be esteem'd a *cause*, and be look'd upon as an instance of that necessity, which we would establish.

The only proper object of hatred or vengeance, is a person or creature, endow'd with thought and consciousness; and when any criminal or injurious actions excite that passion, 'tis only by their relation to the person, or connexion with him. Actions are, by their very nature, temporary and perishing; and where they proceed not from some *cause* in the characters and disposition of the person, who perform'd them, they can neither redound to his honour, if good, nor infamy, if evil. The actions themselves may be blameable; they may be contrary to all the rules of morality and religion: But the person is not responsible for them; and as they proceeded from nothing in him, that is durable and constant, and leave nothing of that nature behind them, 'tis impossible he can, upon their account, become the object of punishment or vengeance. According to the principle, therefore, which denies necessity, and consequently

ſequently cauſes, a man is as pure and untainted, after having committed the moſt horrid crime, as at the firſt moment of his birth, nor is his character any way concern'd in his actions; ſince they are not deriv'd from it, and the wickedneſs of the one can never be us'd as a proof of the depravity of the other.

MEN are not blam'd for ſuch actions as they perform ignorantly and caſually, whatever may be the conſequences. Why? but becauſe the principles of theſe actions are only momentary, and terminate in them alone. Men are leſs blam'd for ſuch actions as they perform haſtily and unpremeditately, than from ſuch as proceed from thought and deliberation. For what reaſon? but becauſe a haſty temper, tho' a conſtant cauſe or principle in the mind, operates only by intervals, and infects not the whole character. Again, repentance wipes off every crime, if attended with a reformation of life and manners. How is this to be accounted for? but by aſſerting, that actions render a perſon criminal, merely as they are proofs of criminal paſſions or principles in the mind; and when, by any alteration of theſe principles, they ceaſe to be juſt proofs, they likewiſe ceaſe to be criminal. But except upon the doctrine of neceſſity, they never were juſt proofs, and conſequently never were criminal.

It will be equally easy to prove, and from the same arguments, that *liberty*, according to that definition above-mentioned, in which all men agree, is also essential to morality, and that no human actions, without it, would be susceptible of any moral qualities, or can be the objects either of approbation or dislike. For as actions are objects of our moral sentiments, so far only as they are indications of principles in the internal character, passions, and affections; it is impossible that they can give rise either to praise or blame, where they proceed not from these principles, but are derived altogether from external force and violence.

I *suppose* not to have obviated or remov'd all objections to this theory, with regard to necessity and liberty. I can foresee other objections, drawn'd from topics, which have not here been mentioned or. It may be said, for instance, that if voluntary actions be subjected to the same laws of necessity with the operations of matter, there is a continu'd chain of necessary causes, pre ordain'd and pre-determin'd reaching from the original cause of all, to every e volition of every human creature. No contingency any where in the universe; no indifference; liberty. While we act, we are, at the same time, d upon. The ultimate Author of all our volitions

as is the Creator of the world, who first bestow'd tion on this immense machine, and plac'd all be- s in that particular position, whence every subse- ent event, by an inevitable necessity, must result. man actions, therefore, either can have no turpi- e at all, as proceeding from so good a cause; or they have any moral turpitude, they must in- ve our Creator in the same guilt, while he is ac- owleged to be their ultimate cause and author. as a man, who fired a mine, is answerable for all consequences, whether the train he employ'd be g or short; so wherever a continu'd chain of ne- sary causes are fix'd, that being, either finite or nite, who produces the first, is likewise the author all the rest, and must both bear the blame, and uire the praise, which belongs to them. Our rest and most unalterable ideas of morality esta- h this rule, upon unquestionable reasons, when examine the consequences of any human action; l these reasons must still have greater force, when ly'd to the volitions and intentions of a Being, nitely wise and powerful. Ignorance or impo- ce may be pleaded for so limited a creature as n; but those imperfections have no place in our ator. He foresaw, he ordain'd, he intended all se actions of men, which we so rashly pronounce minal. And we must conclude, therefore, either it they are not criminal, or that the Deity, not

man, is reſponſible for them. But as either
poſitions is abſurd and impious, it follows, t
doctrine, from which they are deduc'd, cann
bly be true, as being liable to all the ſame
tions. An abſurd conſequence, if neceſſary,
the original doctrine to be abſurd; in the ſan
ner that criminal actions render criminal the
cauſe, if the connexion betwixt them be n
and inevitable.

This objection conſiſts of two parts, wl
ſhall examine ſeparately; *Firſt*, that if human
can be trac'd up, by a neceſſary chain, to th
they can never be criminal; on account of t
nite goodneſs and perfection of that Being, fron
they are deriv'd, and who can intend nothi
what is altogether good and right. Or *Sec*
they be criminal, we muſt retract thoſe attril
goodneſs and perfection, which we aſcribe
Deity, and muſt acknowlege him to be the n
author of guilt and moral turpitude in all hi
tures.

The anſwer to the firſt objection ſeems t
and convincing. There are many philoſopher
after an exact ſcrutiny of all the phænomena
ture, conclude, that the Whole, conſider'd a
ſyſtem, is, in every period of its exiſtence, t

with perfect benevolence and goodness; and that the utmost possible happiness will, in the end, result to every created being, without any mixture of positive or absolute ill and misery. Every physical ill, say they, makes an essential part of this benevolent system, and could not possibly be remov'd, even by the Deity himself, consider'd as a wise agent, without giving entrance to greater ill, or excluding greater good, which will result from it. From this theory, some philosophers, and the antient *Stoics* among the rest, deriv'd a topic of consolation, under all afflictions, while they taught their pupils, that those ills, under which they labour'd, were, in reality, goods to the universe; and that to an enlarg'd view, which could comprehend the whole system of nature, every event became an object of joy and exultation. But tho' this topic be specious and sublime, it was soon found in practice weak and ineffectual. You would surely more irritate, than appease a man, lying under the racking pains of the gout, by preaching up to him the rectitude of those general laws, which produc'd the malignant humours in his body, and led them, thro' the proper canals, to the nerves and sinews, where they now excite such acute torments. These enlarg'd views may, for a moment, please the imagination of a speculative man, who is plac'd in ease and security; but neither can they dwell with constancy on his mind, even tho' undisturb'd by the

emotions of pain or passion; much less can they maintain their ground, when attack'd by such powerful antagonists. The affections take a narrower and more natural survey of their objects; and by an oeconomy, more suitable to the infirmity of human minds, regard alone the beings around us, and are actuated by such events as appear good or ill to the private system. The case is the same with *moral* as with *physical* ill. It cannot reasonably be suppos'd, that those remote considerations, which are found of so little efficacy with regard to one, will have a more powerful influence with regard to the other. The mind of man is so form'd by nature, that, upon the appearance of certain characters, dispositions, and actions, it immediately feels the sentiment of approbation or blame; nor are there any feelings or emotions more essential to its frame and constitution. The characters, which engage its approbation, are chiefly such as contribute to the peace and security of human society; as the characters, which excite blame, are chiefly such as tend to public detriment and disturbance: Whence we may reasonably presume, that the moral sentiments arise, either mediately or immediately, from a reflection on those opposite interests. What tho' philosophical meditations establish a different opinion or conjecture, that every thing is right with regard to the WHOLE, and that the qualities, which disturb society, are, in the main,

as

as beneficial, and are as suitable to the primary intention of nature, as those which more directly promote its happiness and welfare? Are such remote and uncertain speculations able to counter-balance the sentiments, which arise from the natural and immediate view of the objects? A man, who is robb'd of a considerable sum; does he find his vexation for the loss any way diminish'd by these sublime reflections? Why then should his moral resentment against the crime be suppos'd incompatible with them? Or why should not the acknowlegement of a real distinction betwixt vice and virtue be reconcileable to all speculative systems of philosophy, as well as that of a real distinction betwixt personal beauty and deformity? Both these distinctions are founded in the natural sentiments of the human mind: And these sentiments are not to be controul'd or alter'd by any philosophical theory or speculation whatsoever.

THE *second* objection admits not of so easy and satisfactory an answer; nor is it possible to explain distinctly, how the Deity can be the mediate cause of all the actions of men, without being the author of sin and moral turpitude. These are mysteries, which mere natural and unassisted reason is very unfit to handle; and whatever system it embraces, it must find itself involv'd in inextricable difficulties, and even contradictions, at every step which it takes

with

with regard to such subjects. To reconcile the indifference and contingency of human actions with prescience; or to defend absolute decrees, and yet free the Deity from being the author of sin, has been found hitherto to exceed all the skill of philosophy. Happy, if she be thence sensible of her temerity when she pries into these sublime mysteries; and leaving a scene so full of obscurities and perplexities, return, with suitable modesty, to her true and proper province, the examination of common life; where she will find difficulties enough to employ her enquiries, without launching into so boundless an ocean of doubts, uncertainties and contradictions!

ESSAY

ESSAY IX.

Of the REASON *of* ANIMALS.

ALL our reasonings concerning matter of fact are founded on a species of ANALOGY, which leads us to expect from any cause the same events, which we have observ'd to result from similar causes. Where the causes are entirely similar, the analogy is perfect, and the inference, drawn from it, is regarded as certain and conclusive; nor does any man ever entertain a doubt where he sees a piece of iron, that it will have weight and cohesion of parts; as in all other instances, which have ever fallen under his observation. But where the objects have not so exact a similarity, the analogy is less perfect, and

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men, learn many things from
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up a knowlege of the nature of fire, water, earth, stones, heights, depths, *&c.* and of the effects, which result from their operation. The ignorance and inexperience of the young are here plainly distinguishable from the cunning and sagacity of the old, who have learnt, by long observation, to avoid what hurt them, and to pursue what gave ease or pleasure. A horse, that has been accustom'd to the field, becomes acquainted with the proper height, which he can leap, and will never attempt what exceeds his force and ability. An old greyhound will trust the more fatiguing part of the chace to the younger, and will place himself so as to meet the hare in her doubles; nor are the conjectures, which he forms on this occasion, founded in any thing but his observation and experience.

THIS is still more evident from the effects of discipline and education on animals, who, by the proper application of rewards and punishments, may be taught any course of action, the most contrary to their natural instincts and propensities. Is it not experience, which renders a dog apprehensive of pain, when you menace him, or lift up the whip to beat him? Is it not even experience, which makes him answer to his name, and infer, from such an arbitrary sound, that you mean him, rather than any of his fellows, and intend to call him, when you pro-

nounce

nounce it in a certain manner, and with a certain tone and accent?

In all these cases, we may observe, that the animal infers some fact beyond what immediately strikes his senses; and that this inference is altogether founded on past experience, while the creature expects from the present object the same events, which it has always found in its observation to result from similar objects.

Secondly. 'Tis impossible, that this inference of the animal can be founded on any process of argument or reasoning, by which he concludes, that like events must follow like objects, and that the course of nature will always be regular in its operations. For if there be in reality any arguments of this nature, they surely lie too abstruse for the observation of such imperfect understandings; since it may well employ the utmost care and attention of a philosophic genius to discover and observe them. Animals, therefore, are not guided in these inferences by reasoning: Neither are children: Neither are the generality of mankind, in their ordinary actions and conclusions: Neither are philosophers themselves, who, in all the active parts of life, are, in the main, the same with the vulgar, and are govern'd by the same maxims. Nature must have provided some other

other principle, of more ready, and more general use and application; nor can an operation of such immense consequence in life, as that of inferring effects from causes, be trusted to the uncertain process of reasoning and argumentation. Were this doubtful with regard to men, it seems to admit of no question with regard to the brute-creation; and the conclusion being once firmly establish'd in the one, we have a strong presumption, from all the rules of analogy, that it ought to be universally admitted, without any exception or reserve. 'Tis custom alone, which engages animals, from every object, that strikes their senses, to infer its usual attendant, and carries their imagination, from the appearance of the one, to conceive the other, in that strong and lively manner, which we denominate *belief*. No other explication can be given of this operation, in all the higher, as well as lower classes of sensitive beings, which fall under our notice and observation *.

BUT

* Since all reasonings concerning facts or causes is deriv'd merely from custom, it may be ask'd how it happens, that men so much surpass animals in reasoning, and one man so much surpasses another? Has not the same custom the same influence on all?

We shall here endeavour briefly to explain the great difference in human understandings: After which, the reason of the difference betwixt men and animals will easily be comprehended.

1. When we have liv'd any time, and have been accustom'd to the uniformity of nature, we acquire a general habit,

But tho' animals learn many parts of their know lege from obſervation, there are alſo many parts o it, which they derive from the original hand of na

bit, by which we always tranſfer the known to the un known, and conceive the latter to reſemble the former. By means of this general habitual principle, we regard even on experiment as the foundation of reaſoning, and expect a ſi milar event with ſome degree of certainty, where the experiment has been made accurately and free from all foreign circumſtances. 'Tis therefore conſidered as a matter of great importance to obſerve the conſequences of things; and as one man may very much ſurpaſs another in attention and memory and obſervation, this will make a very great difference in their reaſoning.

2. Where there is a complication of cauſes to produce any effect, one mind may be much larger than another, and better able to comprehend the whole ſyſtem of objects, and to infer juſtly their conſequences.

3. One man is able to carry on a chain of conſequences to a greater length than another.

4. Few men can think long without running into a confuſion of ideas, and miſtaking one for another; and there are various degrees of this infirmity.

5. The circumſtance, on which the effect depends, is frequently involv'd in other circumſtances, which are foreign and extrinſic. The ſeparation of it often requires great attention, accuracy and ſubtilty.

6. The forming general maxims from particular obſervation is a very nice operation; and nothing is more uſual from haſte or a narrowneſs of mind, which ſees not on all ſides, than to commit miſtakes in this particular.

7. When we reaſon from analogies, the man, who has the greater experience or the greater promptitude of ſuggeſting analogies, will be the better reaſoner.

8. Byaſſes from prejudice, education, paſſion, party, &c hang more upon one mind than another.

9. After we have acquired a confidence in human teſtimony, books and converſation enlarge much more the ſphere of one man's experience and thought than thoſe of another.

'Twou'd be eaſy to diſcover many other circumſtances that make a difference in the underſtandings of men.

ture

ture, which much exceed the ſhare of capacity they poſſeſs on ordinary occaſions, and in which they improve, little or nothing, by the longeſt practice and experience. Theſe we denominate INSTINCTS, and are ſo apt to admire, as ſomething very extraordinary, and inexplicable by all the diſquiſitions of human underſtanding. But our wonder will, perhaps, ceaſe or diminiſh; when we conſider, that the experimental reaſoning itſelf, which we poſſeſs in common with beaſts, and on which the whole conduct of life depends, is nothing but a ſpecies of inſtinct or mechanical power, that acts in us unknown to ourſelves; and in its chief operations, is not directed by any ſuch relations or compariſons of ideas, as are the proper objects of our intellectual faculties. Tho' the inſtinct be different, yet ſtill 'tis an inſtinct, which teaches a man to avoid the fire; as much as that, which teaches a bird, with ſuch exactneſs, the art of incubation, and the whole oeconomy and order of its nurſery.

ESSAY

ESSAY X.

Of MIRACLES.

PART I.

HERE is in Dr. *Tillotson*'s writings an argu-
ment against the *real presence*, which is as con-
and elegant, and strong as any argument can
ly be suppos'd against a doctrine, that is so
worthy of a serious refutation. 'Tis acknow-
on all hands, says that learned prelate, that
uthority, either of the scripture or of tradition,
unded merely in the testimony of the apostles,
were eye-witnesses to those miracles of our Sa-
, by which he prov'd his divine mission. Our
nce, then, for the truth of the *Christian* reli-
is less than the evidence for the truth of our
; because, even in the first authors of our re-
, it was no greater; and 'tis evident it must
diminish

diminish in passing from them to their disciples; nor can any one be so certain of the truth of their testimony as of the immediate objects of his senses. But a weaker evidence can never destroy a stronger; and therefore, were the doctrine of the real presence ever so clearly reveal'd in scripture, 'twere directly contrary to the rules of just reasoning to give our assent to it. It contradicts sense, tho' both the scripture and tradition, on which it is suppos'd to be built, carry not such evidence with them as sense; when they are consider'd merely as external evidences, and are not brought home to every one's breast, by the immediate operation of the Holy Spirit.

Nothing is so convenient as a decisive argument of this kind, which must at least *silence* the most arrogant bigotry and superstition, and free us from their impertinent sollicitations. I flatter myself, that I have discover'd an argument of a like nature, which, if just, will, with the wise and learned, be an everlasting check to all kinds of superstitious delusion, and consequently, will be useful as long as the world endures. For so long, I presume, will the accounts of miracles and prodigies be found in all history, sacred and prophane.

Tho' experience be our only guide in reasoning concerning matters of fact; it must be acknowledg'd that

that this guide is not altogether infallible, but in ſome caſes is apt to lead us into errors and miſtakes. One, who, in our climate, ſhould expect better weather in any week of *June* than in one of *December*, would reaſon juſtly and conformable to experience; but 'tis certain, that he may happen, in the event, to find himſelf miſtaken. However, we may obſerve, that, in ſuch a caſe, he would have no cauſe to complain of experience; becauſe it commonly informs us beforehand of the uncertainty, by that contrariety of events, which we may learn from a diligent obſervation. All effects follow not with like certainty from their ſuppos'd cauſes. Some events are found, in all countries and all ages, to have been conſtantly conjoin'd together: Others are found to have been more variable, and ſometimes to diſappoint our expectations; ſo that in our reaſonings concerning matter of fact, there are all imaginable degrees of aſſurance, from the higheſt certainty to the loweſt ſpecies of moral evidence.

A WISE man, therefore, proportions his belief to the evidence. In ſuch concluſions as are founded on an infallible experience, he expects the event with the laſt degree of aſſurance, and regards his paſt experience as a full *proof* of the future exiſtence of that event. In other caſes, he proceeds with more caution: He weighs the oppoſite experiments: He con-

[illegible] the greatest number of experiments. For that has no influence, with doubt and hesitation, and when it has no force, it gives his judgment no [illegible] what we properly call [illegible] supposes an opposition of experiments and observations, where the one has a force to overbalance the other, and to maintain a degree of assurance proportion'd to the [illegible] influence of experiments on one side and the other. A very doubtful experiment, or any one that is a hundred uniform experiments, with only one contradictory one, [illegible] a very strong degree of assurance. In all these cases we must balance the opposite experiments, weigh them one against another, and [illegible] the left hand number from the greater, in order to know the exact force of the superior evidence.

To apply these principles to a particular instance; [illegible] there is no species of reasoning more common, more useful, and even necessary to human life, than that derived from testimony, and the reports of eye-witnesses and [illegible]. This species of reasoning, perhaps, [illegible] deny to be founded on the relation [illegible] fact. I shall not dispute [illegible] sufficient to [illegible] ment of this kind to d

than our obſervation of the veracity of human teſtimony, and of the uſual conformity of facts to the reports of witneſſes. It being a general maxim, that no objects have any diſcoverable connexion together, and that all the inferences, which we can draw from one to another, are founded merely on our experience of their conſtant and regular conjunction; 'tis evident that we ought not to make an exception to this maxim in favour of human teſtimony, whoſe connexion with any events ſeems, in itſelf, as little neceſſary as any other. Did not mens imagination naturally follow their memory; had they not commonly an inclination to truth and a ſentiment of probity; were they not ſenſible to ſhame, when detected in a falſhood: Were not theſe, I ſay, diſcover'd by *experience* to be qualities, inherent in human nature, we ſhould never repoſe the leaſt confidence in human teſtimony. A man delirious, or noted for falſhood and villany, has no manner of weight or authority with us.

And as the evidence, deriv'd from witneſſes and human teſtimony, is founded on paſt experience, ſo it varies with the experience, and is regarded either as a *proof* or a *probability*, according as the conjunction betwixt any particular kind of report and any kind of objects, has been found to be conſtant or variable. There are a number of circum-

ſtances to be taken into conſideration in all judgments of this kind; and the ultimate ſtandard, by which we determine all diſputes, that may ariſe concerning them, is always deriv'd from experience and obſervation. Where this experience is not entirely uniform on any ſide, 'tis attended with an unavoidable contrariety in our judgments, and with the ſame oppoſition and mutual deſtruction of arguments as in every other kind of evidence. We frequently heſitate concerning the reports of others. We balance the oppoſite circumſtances, which cauſe any doubt or uncertainty; and when we diſcover a ſuperiority on any ſide, we incline to it; but ſtill with a diminution of aſſurance, in proportion to the force of its antagoniſt.

This contrariety of evidence, in the preſent caſe, may be deriv'd from ſeveral different cauſes; from the oppoſition of contrary teſtimony; from the character or number of the witneſſes; from the manner of their delivering their teſtimony; or from the union of all theſe circumſtances. We entertain a ſuſpicion concerning any matter of fact, when the witneſſes contradict each other; when they are but few, or of a ſuſpicious character; when they have an intereſt in what they affirm; when they deliver their teſtimony with doubt and heſitation, or on the contrary, with too violent aſſeverations. There are many other particulars

ticulars of the ſame kind, which may diminiſh or deſtroy the force of any argument, deriv'd from human teſtimony.

SUPPOSE, for inſtance, that the fact, which the teſtimony endeavours to eſtabliſh, partakes of the extraordinary and the marvellous; in that caſe, the evidence, reſulting from the teſtimony, receives a diminution, greater or leſs, in proportion as the fact is more or leſs unuſual. The reaſon, why we place any credit in witneſſes and hiſtorians is not from any *connexion*, which we perceive *à priori* betwixt teſtimony and reality, but becauſe we are accuſtom'd to find a conformity betwixt them. But when the fact atteſted is ſuch a one as has ſeldom fallen under our obſervation, here is a conteſt of two oppoſite experiences; of which the one deſtroys the other as far as its force goes, and the ſuperior can only operate on the mind by the force, which remains. The very ſame principle of experience, which gives us a certain degree of aſſurance on the teſtimony of witneſſes, gives us alſo, in this caſe, another degree of aſſurance againſt the fact, which they endeavour to eſtabliſh; from which contradiction there neceſſarily ariſes a counterpoize, and mutual deſtruction of belief and authority.

I ſhou'd not believe ſuch a ſtory were it told me by Cato; was a proverbial ſaying in *Rome*, even during

the life-time of that philosophical patriot *. The incredibility of a fact, it was allow'd, might invalidate so great an authority.

THE *Indian* prince, who refus'd to believe the first relations concerning the effects of frost, reason'd justly; and it naturally required very strong testimony to engage his assent to facts, which arose from a state of nature, with which he was unacquainted, and bore so little analogy to those events, of which he had had constant and uniform experience. Tho' they were not contrary to his experience, they were not conformable to it †.

* Plutarch. in vita Catonis.

† No *Indian*, 'tis evident, could have experience, that water did not freeze in cold climates. This is placing nature in a situation quite unknown to him; and 'tis impossible for him to tell, *à priori*, what will result from it. 'Tis making a new experiment, the consequence of which is always uncertain. One may sometimes conjecture from analogy what will follow; but still this is but conjecture. And it must be confest, that, in the present case of freezing, the event follows contrary to the rules of analogy, and is such as a rational *Indian* would not look for. The operations of cold upon water are not gradual, according to the degrees of cold; but whenever it comes to the freezing point, the water passes, in a moment, from the utmost liquidity to perfect hardness. Such an event, therefore, may be denominated *extraordinary*, and requires a pretty strong testimony to render it credible to people in a warm climate: But still it is not *miraculous*, nor contrary to uniform experience of the course of nature in cases where all the circumstances are the same. The inhabitants of *Sumatra* have always seen water liquid in their own climate, and the freezing of their rivers ought to be deem'd a prodigy: But they never saw water in *Muscovy* during the winter; and therefore they cannot reasonably be positive what would there be the consequence.

BUT

BUT in order to increaſe the probability againſt the teſtimony of witneſſes, let us ſuppoſe that the fact, which they affirm, inſtead of being only marvellous, is really miraculous; and ſuppoſe alſo, that the teſtimony, conſider'd apart, and in itſelf, amounts to an entire proof; in that caſe there is proof againſt proof, of which the ſtrongeſt muſt prevail, but ſtill with a diminution of its force, in proportion to that of its antagoniſt.

A MIRACLE is a violation of the laws of nature; and as a firm and unalterable experience has eſtabliſh'd theſe laws, the proof againſt a miracle, from the very nature of the fact, is as entire as any argument from experience can poſſibly be imagin'd. Why is it more than probable, that all men muſt die; that lead cannot, of itſelf, remain ſuſpended in the air; that fire conſumes wood, and is extinguiſh'd by water; unleſs it be that theſe events are found agreeable to the laws of nature, and there is requir'd a violation of theſe laws, or in other words, a miracle to prevent them? Nothing is eſteem'd a miracle if it ever happen in the common courſe of nature. 'Tis no miracle that a man in ſeeming good health ſhould die on a ſudden; becauſe ſuch a kind of death, tho' more unuſual than any other, has yet been frequently obſerv'd to happen. But 'tis a mi-

racle, that a dead man ſhould come to life; becauſe that has never been obſerv'd, in any age or country. There muſt, therefore, be an uniform experience againſt every miraculous event, otherwiſe the event would not merit that appellation. And as an uniform experience amounts to a proof, there is here a direct and full *proof*, from the nature of the fact, againſt the exiſtence of any miracle; nor can ſuch a proof be deſtroy'd, or the miracle render'd credible, but by an oppoſite proof, which is ſuperior *.

THE plain conſequence is (and 'tis a general maxim worthy of our attention) "That no teſtimony is ſuf-

* Sometimes an event may not, *in itſelf*, *ſeem* to be contrary to the laws of nature, and yet, if it were real, it might, by reaſon of ſome circumſtances, be denominated a miracle, becauſe, *in fact*, it is contrary to theſe laws. Thus if a perſon, claiming a divine authority, ſhould command a ſick perſon to be well, a healthful man to fall down dead, the clouds to pour rain, the winds to blow, in ſhort, ſhould order many natural events, which immediately follow upon his command; theſe might juſtly be eſteem'd miracles, becauſe they are really, in this caſe, contrary to the laws of nature. For if any ſuſpicion remain, that the event and command concurr'd by accident, there is no miracle and no tranſgreſſion of the laws of nature. If this ſuſpicion be remov'd, there is evidently a miracle, and a tranſgreſſion of theſe laws; becauſe nothing can be more contrary to nature than that the voice or command of a man ſhould have ſuch an influence. A miracle may be accurately defin'd, *a tranſgreſſion of a law of nature by a particular volition of the Deity, or by the interpoſal of ſome inviſible agent.* A miracle may either be diſcoverable by men or not. This alters not its nature and eſſence. The raiſing of a houſe or ſhip into the air is a viſible miracle. The raiſing of a feather, when the wind wants ever ſo little of a force requiſite for that purpoſe, is as real a miracle, tho' not ſo ſenſible with regard to us,

" ſuiſant

"ficient to eſtabliſh a miracle, unleſs the teſtimony "be of ſuch a kind, that its falſhood would be "more miraculous, than the fact, which it endea- "vours to eſtabliſh: And even in that caſe, there is "a mutual deſtruction of arguments, and the ſuperior "only gives us an aſſurance ſuitable to that degree "of force, which remains, after deducting the infe- "rior." When any one tells me, that he ſaw a dead man reſtor'd to life, I immediately conſider with myſelf, whether it be more probable, that this perſon ſhould either deceive or be deceiv'd, or that the fact which he relates, ſhould really have happen'd. I weigh the one miracle againſt the other, and according to the ſuperiority, which I diſcover, I pronounce my deciſion, and always reject the greater miracle. If the falſhood of his teſtimony would be more miraculous, than the event, which he relates; then, and not till then, can he pretend to command my belief or opinion.

PART II.

In the foregoing reaſoning we have ſuppos'd, that the teſtimony, upon which a miracle is founded, may poſſibly amount to an entire proof, and that the falſhood of that teſtimony would be a kind of pro-

digy. But 'tis easy to shew, that we have been a great deal too liberal in our concessions, and that there never was a miraculous event, establish'd on so full an evidence.

For *first*, there is not to be found, in all history, any miracle attested by a sufficient number of men, of such unquestion'd good-sense, education, and learning as to secure us against all delusion in themselves; of such undoubted integrity, as to place them beyond all suspicion of any design to deceive others; of such credit and reputation in the eyes of mankind as to have a great deal to lose in case of being detected in any falshood; and at the same time attesting facts, perform'd in such a public manner, and in so celebrated a part of the world, as to render the detection unavoidable: All which circumstances are requisite to give us a full assurance in the testimony of men.

Secondly. We may observe in human nature a principle, which, if strictly examin'd, will be found to diminish extremely the assurance, which we might have, from human testimony, in any kind of prodigy. The maxim, by which we commonly conduct ourselves in our reasonings, is, that the objects, of which we have no experience, resemble those, of which we have; that what we have found to be most

usual

ıſual is always moſt probable; and that where there s any oppoſition of arguments, we ought to give the preference to ſuch of them as are founded on the greateſt number of paſt obſervations. But tho' in proceeding by this rule, we readily reject any fact, which is unuſual and incredible in an ordinary degree; yet in advancing farther, the mind obſerves not always the ſame rule; but when any thing is affirm'd utterly abſurd and miraculous, it rather the more readily admits ſuch a fact, upon account of that very circumſtance, which ought to deſtroy all its authority. The paſſion of *ſurprize* and *wonder*, riſing from miracles, being an agreeable emotion, gives a ſenſible tendency towards the belief of thoſe events, from which it is deriv'd. And this goes ſo far, that even thoſe who cannot enjoy this pleaſure immediately, nor can believe thoſe miraculous events, of which they are inform'd, yet love to partake of the ſatisfaction at ſecond-hand, or by rebound, and place a pride and delight in exciting the admiration of others.

WITH what greedineſs are the miraculous accounts of travellers receiv'd, their deſcriptions of ſea and land monſters, their relations of wonderful adventures, ſtrange men, and uncouth manners? But ſ the ſpirit of religion join itſelf to the love of won-

der, there is an end of common ſenſe; and human teſtimony, in theſe circumſtances, loſes all pretenſions to authority. A religioniſt may be an enthuſiaſt, and imagine he ſees what has no reality: He may know his narration to be falſe, and yet perſevere in it, with the beſt intentions in the world, for the ſake of promoting ſo holy a cauſe: Or even where this deluſion has no place, vanity, excited by ſo ſtrong a temptation, operates on him more powerfully than on the reſt of mankind in any other circumſtances; and ſelf-intereſt with equal force. His auditors may not have, and commonly have not ſufficient judgment to canvaſs his evidence: What judgment they have, they renounce by principle, in theſe ſublime and myſterious ſubjects: Or if they were ever ſo willing to employ it, paſſion and a heated imagination diſturb the regularity of its operations. Their credulity increaſes his impudence: And his impudence over powers their credulity.

Eloquence, when in its higheſt pitch, leaves little room for reaſon or reflection; but addreſſing itſelf entirely to the fancy or the affections, captivates the willing hearers, and ſubdues their underſtanding. Happily, this pitch it ſeldom attains. But what a *Cicero* or a *Demoſthenes* could ſcarcely operate over a *Roman* or *Athenian* audience, every *Capuchin*, every itine-

nt or ſtationary teacher can perform over the
ility of mankind, and in a higher degree, by
ng ſuch groſs and vulgar paſſions *.

IRDLY. It forms a very ſtrong preſumption
t all ſupernatural and miraculous relations,
ney are obſerv'd chiefly to abound amongſt ig-
t and barbarous nations; or if a civiliz'd peo-
as ever given admiſſion to any of them, that
e will be found to have receiv'd them from ig-
t and barbarous anceſtors, who tranſmitted them
that inviolable ſanction and authority, which
s attends antient and receiv'd opinions. When
ruſe the firſt hiſtories of all nations, we are apt

'he many inſtances of forg'd miracles, and prophecies
pernatural events, which, in all ages, have either been
:d by contrary evidence, or which detect themſelves
ir abſurdity, mark ſufficiently the ſtrong propenſity of
nd to the extraordinary and the marvellous, and ought
ably to beget a ſuſpicion againſt all relations of this
This is our natural way of thinking even with re-
o the moſt common and moſt credible events. For
:e: There is no kind of report, which riſes ſo eaſily,
reads ſo quickly, eſpecially in country-places and pro-
towns, as thoſe concerning marriages; infomuch that
oung perſons of equal condition never ſee each other
but the whole neighbourhood immediately join them
er. The pleaſure of telling a piece of news ſo in-
ng, of propagating it, and of being the firſt reporters
ſpreads the intelligence. And this is ſo well known,
o man of ſenſe gives attention to theſe reports, till
ls them confirm'd by ſome greater evidence. Do not
ne paſſions, and others ſtill ſtronger, incline the gene-
of mankind to the believing and reporting, with the
ſt vehemence and aſſurance, all religious miracles?

to

to imagine ourſelves tranſported into ſome new world, where the whole frame of nature is disjointed, and every element performs its operations in a different manner, from what it does at preſent. Battles, revolutions, peſtilences, famines, and death are never the effects of thoſe natural cauſes, which we experience. Prodigies, omens, oracles, judgments quite obſcure and over-ſhadow the few natural events, that are intermingled with them. But as the former grow thinner every page, in proportion as we advance nearer the enlighten'd ages of ſcience and knowlege, we ſoon learn, that there is nothing myſterious or ſupernatural in the caſe, but that all proceeds from the uſual propenſity of mankind towards the marvellous and extraordinary, and that tho' this inclination may at intervals receive a check from ſenſe and learning, it can never thoroughly be extirpated from human nature.

'Tis ſtrange, a judicious reader is apt to ſay, upon the peruſal of theſe wonderful hiſtorians, *that ſuch prodigious events never happen in our days.* But 'tis nothing ſtrange, I hope, that men ſhould lie in all ages. You muſt ſurely have ſeen inſtances enow of that frailty. You have yourſelf heard many ſuch marvellous relations ſtarted, which being treated with ſcorn by all the wiſe and judicious, have at laſt been abandon'd, even by the vulgar. Be aſſur'd, that

 thoſe

those renown'd lies, which have spred and flourish'd to such a monstrous height, arose from like beginnings; but being sown in a more proper soil, shot up at last into prodigies almost equal to those, which they relate.

'TWAS a wise policy in that cunning impostor, *Alexander*, who, tho' now forgotten, was once so famous, to lay the first scene of his impostures in *Paphlagonia*, where, as *Lucian* tells us, the people were extremely ignorant and stupid, and ready to swallow even the grossest delusion. People at a distance, who are weak enough to think the matter at all worth enquiry, have no opportunity of receiving better information. The stories come magnify'd to them by a hundred circumstances. Fools are industrious to propagate the delusion; while the wise and learned are contented, in general, to deride its absurdity, without informing themselves of the particular facts, by which it may be distinctly refuted. And thus the impostor above-mention'd was enabled to proceed, from his ignorant *Popblagonians*, to the inlisting of votaries, even among the *Grecian* philosophers, and men of the most eminent rank and distinction in *Rome*. Nay could engage the attention of that sage emperor *Marcus Aurelius*; so far as to make him

trust

truſt the ſucceſs of a military expedition to his deluſive prophecies.

The advantages are ſo great of ſtarting an impoſture amongſt an ignorant people, that even tho' the deluſion ſhould be too groſs to impoſe on the generality of them (*which, tho' ſeldom, is ſometimes the caſe*) it has a much better chance of ſucceeding in remote countries, than if the firſt ſcene had been laid in a city renown'd for arts and knowlege. The moſt ignorant and barbarous of theſe barbarians carry the report abroad. None of their countrymen have large enough correſpondence or ſufficient credit and authority to contradict and beat down the deluſion. Mens inclination to the marvellous has full opportunity to diſplay itſelf. And thus a ſtory ſhall paſs for certain at a thouſand miles diſtance, which is univerſally exploded in the place where it was firſt ſtarted. But had *Alexander* fix'd his reſidence at *Athens*, the philoſophers of that renown'd mart of learning, had immediately ſpred, thro' the whole *Roman* empire, their ſenſe of the matter, which, being ſupported by ſo great authority, and diſplay'd by all the force of reaſon and eloquence, had entirely open'd the eyes of mankind. 'Tis true; *Lucian* paſſing by chance thro' *Paphlagonia* had an opportunity of performing this good office. But, tho' much to

be

: wiſh'd, it does not always happen, that every *Alexander* meets with a *Lucian*, ready to expoſe and etect his impoſtures *.

I MAY add as a *fourth* reaſon, which diminiſhes ıe authority of prodigies, that there is no teſtimony ɔr any, even thoſe which have not been expreſsly etected, that is not oppos'd by an infinite number f witneſſes; ſo that not only the miracle deſtroys he credit of the teſtimony, but even the teſtimony leſtroys itſelf. To make this the better underſtood, et us conſider, that, in matters of religion, whatver is different is contrary, and that 'tis impoſſible he religions of antient *Rome*, of *Turkey*, of *Siam*, ınd of *China* ſhould, all of them, be eſtabliſh'd on ıny ſolid foundation. Every miracle, therefore, pretended to have been wrought in any of theſe religions (and all of them abound in miracles) as its direct ſcope is to eſtabliſh the particular ſyſtem, to which it is attributed; ſo it has the ſame force, tho'

* It may here, perhaps, be objected, that I proceed raſhly, and form my notions of *Alexander* merely from the account, given of him by *Lucian*, a profeſs'd enemy. It were, indeed, to be wiſh'd, that ſome of the accounts publiſh'd by his followers and accomplices had remain'd. The oppoſition and contraſt betwixt the character and conduct of the ſame man, as drawn by a friend or an enemy is as ſtrong, even in common life, much more in theſe religious matters, as that betwixt any two men in the world, betwixt *Alexander* and St. *Paul*, for inſtance. See a letter to *Gilbert Weſt*, Eſq; on the converſion and apoſtleſhip of St. *Paul*.

more

more indirectly, to overthrow every other ſyſtem. In deſtroying a rival-ſyſtem, it likewiſe deſtroys the credit of thoſe miracles, on which that ſyſtem was eſtabliſh'd; ſo that all the prodigies of different religions are to be regarded as contrary facts, and the evidences of theſe prodigies, whether weak or ſtrong, as oppoſite to each other. According to this method of reaſoning, when we believe any miracle of *Mahomet* or any of his ſucceſſors, we have for our warrant the teſtimony of a few barbarous *Arabians*: And on the other ſide, we are to regard the authority of *Titus Livius*, *Plutarch*, *Tacitus*, and in ſhort of all the authors and witneſſes, *Grecian*, *Chineſe*, and *Roman Catholic*, who have related any miracles in their particular religion; I ſay, we are to regard their teſtimony in the ſame light as if they had mention'd that *Mahometan* miracle, and had in expreſs terms contradicted it, with the ſame certainty as they have for the miracles they relate. This argument may appear over ſubtile and refin'd; but is not in reality different from the reaſoning of a judge, who ſuppoſes, that the credit of two witneſſes, maintaining a crime againſt any one, is deſtroy'd by the teſtimony of two others, who affirm him to have been two hundred leagues diſtant, at the ſame inſtant when the crime is ſaid to have been committed.

One of the beſt atteſted miracles in all prophane hiſtory is that which *Tacitus* reports of *Veſpaſian*, who cur'd

cur'd a blind man in *Alexandria*, by means of his ſpittle, and a lame man by the mere touch of his foot; in obedience to a viſion of the god, *Serapis*, who had enjoin'd them to have recourſe to the emperor, for theſe miraculous and extraordinary cures. The ſtory may be ſeen in that fine hiſtorian*; where every circumſtance ſeems to add weight to the teſtimony, and might be diſplay'd at large with all the force of argument and eloquence, if any one were now concern'd to enforce the evidence of that exploded and idolatrous ſuperſtition. The gravity, ſolidity, age, and probity of ſo great an emperor, who, thro' the whole courſe of his life, convers'd in a familiar way with his friends and courtiers, and never affected thoſe extraordinary airs of divinity, aſſum'd by *Alexander* and *Demetrius*. The hiſtorian, a cotemporary writer, noted for candour and veracity, and withal, the greateſt and moſt penetrating genius, perhaps, of all antiquity; and ſo free from any tendency to ſuperſtition and credulity, that he even lies under the contrary imputation, of atheiſm and prophaneneſs: The perſon, from whoſe teſti- [illegible] mony he related the miracle, of eſtabliſh'd character for judgment and veracity, as we [illegible] eye-witneſſes of the fact, and confirm [illegible] after the *Flavian* family were diſpa[illegible]

* Hiſt. Lib. 5. Cap. 8. [illegible] in *Vita Veſp.*

pire, and could no longer give any reward, as the price of a lie. *Utrumque, qui interfuere, nunc quoque memorant, postquam nullum mendacio pretium.* To which if we add the public nature of the facts, related, it will appear, that no evidence can well be suppos'd stronger for so gross and so palpable a falsehood.

THERE is also a very memorable story related by *Cardinal de Retz*, and which may well deserve our consideration. When that intriguing politician fled into *Spain*, to avoid the persecution of his enemies, he passed thro' *Saragossa*, the capital of *Arragon*, where he was shewn, in the cathedral church, a man, who had serv'd twenty years as a door-keeper of the church, and was well known to every body in town, that had ever paid their devotions at that cathedral. He had been seen, for so long a time, wanting a leg; but recover'd that limb by the rubbing of holy oil upon the stump; and the cardinal assures us that he saw him with two legs. This miracle was vouch'd by all the canons of the church; and the whole company in town were appealed to for a confirmation of the fact; whom the cardinal found, by their zealous devotion, to be thorough believers of the miracle. Here the relater was also cotemporary to the suppos'd prodigy, of an incredulous and libertine character as well as of great genius, the miracle of

ſingular a nature as could ſcarce admit of a
:rfeit, and the witneſſes very numerous, and all
:m, in a manner, ſpectators of the fact, to
they gave their teſtimony. And what adds
ily to the force of the evidence, and may
e our ſurprize on this occaſion, is, that the
ıal himſelf, who relates the ſtory, ſeems not to
ıny credit to it, and conſequently cannot be
ted of any concurrence in the holy fraud. He
ler'd juſtly, that it was not requiſite, in order to
a fact of this nature, to be able accurately to
ove the teſtimony, and to trace its falſhood,
all the circumſtances of knavery and credulity,
h produc'd it. He knew, that, as this was com-
y altogether impoſſible at any ſmall diſtance of
and place; ſo was it extremely difficult, even
e one was immediately preſent, by reaſon of the
try, ignorance, cunning, and roguery of a
t part of mankind. He therefore concluded,
— that ſuch an evidence carry'd
and that a miracle,
ore pro-

sanctity the people were so long deluded. The curing of the sick, giving hearing to the deaf, and sight to the blind, were every where talk'd of, as the usual effects of that holy sepulchre. But what is more extraordinary; many of the miracles were immediately prov'd, upon the spot, before judges of unquestion'd integrity, attested by witnesses of credit and distinction in a learned age, and on the most eminent theatre, that is now in the world. Nor is this all: A relation of them was publish'd, and dispers'd every where; nor were the *Jesuits*, tho' a learned body, supported by the civil magistrate, and determin'd enemies to those opinions, in whose favour the miracles were said to have been wrought, ever able distinctly to refute or detect them *. Where shall we

*This book was wrote by Monf. *de Montgeron*, counsellor or judge of the parliament of *Paris*, a man of figure and character, who was also a martyr to the cause, and is now said to be somewhere in a dungeon on account of his book.

There is another book in three volumes (called *Recueil de Miracles de l'Abbé Paris*) giving an account of many of these miracles, and accompanied with prefatory discourses, which are very well wrote. There runs, however, thro' the whole of these a ridiculous comparison betwixt the miracles of our Saviour and those of the *Abbé*; wherein 'tis asserted, that the evidence for the latter is equal to that for the former: As if the testimony of men could ever be put in the balance with that of God himself, who conducted the pen of the inspir'd writers. If these writers, indeed, were to be consider'd merely as human testimony, the *French* author is very moderate in his comparison; since he might, with some appearance of reason, pretend, that the *Jansenist* miracles much surpass the others in evidence and authority. The follow-

ıd ſuch a number of circumſtances, agreeing to
rroboration of one fact? And what have we
ɔoſe to ſuch a cloud of witneſſes, but the abſo-
ıpoſſibility or miraculous nature of the events,
which

cumſtances are drawn from authentic papers, inſerted
above-mention'd book:
ıy of the miracles of *Abbé Paris* were prov'd immedi-
ıy witneſſes before the officiality or biſhop's court of
under the eye of cardinal *Noailles*, whoſe character for
ty and capacity was never conteſted even by his ene-

ſucceſſor in the archbiſhopric was an enemy to the
iſts, and for that reaſon promoted to the ſee by the
Yet 22 rectors or *curés* of *Paris*, with infinite ear-
ſs, preſs him to examine thoſe miracles, which they
to be known to the whole world, and indiſputably
ı: But he wiſely forbore.
: *Moliniſt* party had try'd to diſcredit theſe miracles in
ıſtance, that of *Madamoiſelle le Franc*. But beſides, that
proceedings were in many reſpects the moſt irregular
world, particularly in citing only a few of the *Janſe-*
vitneſſes, whom they tamper'd with: Beſides this, I
hey ſoon found themſelves overwhelm'd by a cloud of
witneſſes, one hundred and twenty in number, moſt of
perſons of credit and ſubſtance in *Paris*, who gave
for the miracle. This was accompanied with a ſo-
and earneſt appeal to the parliament. But the par-
nt were forbid by authority to meddle in the affair.
s at laſt obſerv'd, that where men are heated by zeal
ınthuſiaſm, there is no degree of human teſtimony ſo
g as may not be procur'd for the greateſt abſurdity:
thoſe who will be ſo ſilly at to examine the affair
at medium, and ſeek particular flaws in the teſtimo-
ıre almoſt ſure to be confounded. It muſt be a miſer-
impoſture, indeed, that does not prevail in that con-

ll who have been in *France* about that time have heard of
great reputation of Monſ. *Heraut*, the *lieutenant de Police*,
ſe vigilance, penetration, activity, and extenſive intel-
ce *have been much* talk'd of. This magiſtrate, who
by

which they relate? And this surely, in the all reasonable people, will alone be regarc sufficient refutation.

Is the consequence just, because some hu timony has the utmost force and authority

by the nature of his office is almost absolute, wa: with full powers, on purpose to suppress or discr miracles; and he frequently seiz'd immediately, min'd the witnesses and subjects of them: But ne reach any thing satisfactory against them.

In the case of *Madamoiselle Thibaut* he sent the fa *Sylva* to examine her; whose evidence is very cur physician declares, that it was impossible she co been so ill as was prov'd by witnesses; because it possible she cou'd, in so short a time, have reco perfectly as he found her. He reasoned like a man from natural causes; but the opposite party told h the whole was a miracle, and that his evidence was best proof of it.

The *Molinists* were in a sad dilemma. They dur fert the absolute insufficiency of human evidence a miracle: They were oblig'd to say, that these were wrought by witchcraft and the devil. But th told, that this was the resource of the *Jews* of old

No *Jansenist* was ever embarrass'd to account for fation of the miracles, when the church-yard was by the king's edict. 'Twas the touch of the tomb operated these extraordinary effects; and when could approach the tomb, no effects could be e God, indeed, could have thrown down the walls i ment; but he is master of his own graces and wo it belongs not to us to account for them. He did no down the walls of every city, like those of *Jericho*, founding of the rams-horns, nor break up the p every apostle, like that of St. *Paul*.

No less a man, than the *Duc de Chatillon*, a duke: of *France* of the highest rank and family, gives evic a miraculous cure, perform'd upon a servant of his, v

ases, when it [illegible]

alia, for [illegible]

mony must, in all [illegible]

thority? Suppose [illegible]

liv'd several years in [illegible]
infirmity.

I shall conclude w[illegible] celebrated for [illegible] lar clergy of *France*, [illegible] who bear such testimony [illegible]

The learning, genius, [illegible] the austerity of the nuns of *Port-Royal* [illegible] lebrated all over *Europe*. Yet [illegible] miracle, wrought on the niece of the famous *Pascal*, whose sanctity of life, as well as extraordinary [illegible] known. The famous *Racine* gives an account of this miracle in his famous history of *Port-Royal*, and [illegible] with all the proofs, which a multitude of nuns, priests, physicians, and men of the world, all of them of unbounded credit, cou'd bestow upon it. Several men of letters, particularly the bishop of *Tournay*, thought this miracle so certain, as to employ it in the refutation of atheists and free-thinkers. The queen-regent of *France*, who was extremely prejudic'd against *Port-Royal*, sent her own physician to examine the miracle, who return'd an absolute convert. In short, the supernatural cure was so uncontestable, that it sav'd, for a time, that famous monastery from the ruin with which it was threaten'd by the *Jesuits*. Had it been a cheat, it had certainly been detected by such sagacious and powerful antagonists, and must have hasten'd the ruin of the contrivers. Our divines, who can build up a formidable castle from such despicable materials; what a prodigious fabric cou'd they have rear'd from these and many other circumstances, which I have not mention'd! How oft wou'd the great names of *Pascal*, *Racine*, *Arnaud*, *Nicole*, have resounded in our ears? But if they be wise, they had better adopt the miracle, as being more worth, a thousand times, than all the rest of their collection. Besides, it may serve very much to their purpose. For it was really performed by the touch of an authentic holy prick of the holy thorn, which compos'd the holy crown, which, *&c.*

factions had, each of them, claim'd the victory in these battles, and that the historians of each party had uniformly ascrib'd the advantage to their own side; how could mankind, at this distance, have been able to determine betwixt them? The contrariety is equally strong betwixt the miracles related by *Herodotus* or *Plutarch*, and those deliver'd by *Mariana*, *Bede*, or any monkish historian.

THE wise lend a very academic faith to every report, which favours the passion of the reporter, whether it magnifies his country, his family, or himself, or in any other way strikes in with his natural inclinations and propensities. But what greater temptation than to appear a missionary, a prophet, an ambassador from heaven? Who would not encounter many dangers and difficulties, in order to attain so sublime a character? Or if, by the help of vanity and a heated imagination, a man has first made a convert of himself and enter'd seriously into the delusion; who ever scruples to make use of pious frauds, in support of so holy and meritorious a cause?

THE smallest spark may here kindle into the greatest flame; because the materials are always prepar'd for it. The *avidum genus auricularum* *, swallow greedily, without examination, whatever sooths superstition, and promotes wonder.

* Lucret.

How

How many stories of this nature have in all ages, been detected and exploded in their infancy? How many more have been celebrated for a time, and have afterwards sunk into neglect and oblivion? Where such reports, therefore, fly about, the detection of the phænomenon is obvious: and we judge in conformity to regular experience and observation, when we account for it by the known and natural principles of credulity and delusion. And shall we, rather than have a recourse to so natural a solution, allow of a miraculous violation of the most establish'd laws of nature?

I need not mention the difficulty of detecting a falsehood in any private or even public history, at the time and place, where it is said to happen; much more where the scene is remov'd to ever so small a distance. Even a court of judicature, with all the authority, accuracy, and judgment, which they can employ, find themselves often at a loss to distinguish betwixt truth and falshood in the most recent actions. But the matter never comes to any issue, if trusted to the common method of altercation and debate and flying rumours; especially when men's passions have taken party on either side.

In the infancy of new religions, the wise and learned commonly esteem the matter too inconsider-

able to deſerve their attention or regard: And when afterwards they would willingly detect the cheat, in order to undeceive the deluded multitude, the ſeaſon is now gone, and the records and witneſſes, that might clear up the matter, have periſh'd beyond recovery.

No means of detection remain, but thoſe which muſt be drawn from the very teſtimony itſelf of the reporters: And theſe, tho' always ſufficient with the judicious and knowing, are commonly too fine to fall under the comprehenſion of the vulgar.

Upon the whole, then, it appears, that no teſtimony for any kind of miracle has ever amounted to a probability, much leſs to a proof; and that even ſuppoſing it amounted to a proof, it would be oppos'd by another proof, deriv'd from the very nature of the fact, which it would endeavour to eſtabliſh. 'Tis experience only, which gives authority to human teſtimony; and 'tis the ſame experience, which aſſures us of the laws of nature. When, therefore, theſe two kinds of experience are contrary, we have nothing to do but ſubſtract the one from the other, and embrace an opinion, either on one ſide or the other, with that aſſurance, which ariſes from the remainder. But according to the principle here explain'd, this ſubſtraction, with regard to all popular religions, amounts to an entire annihilation;

lation; and therefore we may eſtabliſh it as a maxim, that no human teſtimony can have ſuch force as to prove a miracle, and make it a juſt foundation for any ſuch ſyſtem of religion *.

* I beg the limitations here made may be remark'd, when I ſay, that a miracle can never be prov'd, ſo as to be the foundation of a ſyſtem of religion. For I own, that otherwiſe, there may poſſibly be miracles, or violations of the uſual courſe of nature, of ſuch a kind as to admit of proof from human teſtimony; tho', perhaps, it will be impoſſible to find any ſuch in all the records of hiſtory, Thus ſuppoſe, all authors, in all languages, agree, that from the firſt of *January*, 1600, there was a total darkneſs over the whole earth for eight days: Suppoſe that the tradition of this extraordinary event, is ſtill ſtrong and lively among the people: That all travellers, who return from foreign countries, bring us accounts of the ſame tradition, without the leaſt variation or contradiction: 'Tis evident, that our preſent philoſophers, inſtead of doubting of that fact, ought to receive it for certain, and ought to ſearch for the cauſes, whence it might be deriv'd. The decay, corruption, and diſſolution of nature, is an event render'd probable by ſo many analogies, that any phænomenon, which ſeems to have a tendency towards that cataſtrophe, comes within the reach of human teſtimony, if that teſtimony be very extenſive, and uniform.

But ſuppoſe, that all the hiſtorians, who treat of *England*, ſhould agree, that on the firſt of *January*, 1600, queen *Elizabeth* died; that both before and after her death ſhe was ſeen by her phyſicians and the whole court, as is uſual with perſons of her rank; that her ſucceſſor was acknowleg'd and proclaim'd by the parliament; and that, after being interr'd a month, ſhe again appear'd, took poſſeſſion of the throne, and govern'd *England* for three years: I muſt confeſs I ſhould be ſurpriz'd at the concurrence of ſo many odd circumſtances, but ſhould not have the leaſt inclination to believe ſo miraculous an event. I ſhould not doubt of her pretended death, and of thoſe other public circumſtances, that follow'd it: I ſhould only aſſert it to have been pretended, and that it neither was, nor poſſibly could be real.

You

I AM the better pleas'd with this method of reasoning, as I think it may serve to confound those dangerous friends or disguis'd enemies to the *Christian Religion*, who have undertaken to defend it by the principles of human reason. Our most holy religion is founded on *Faith*, not on reason; and 'tis a sure method of exposing it to put it to such a trial as it is, by no means, fitted to endure. To make this more evident, let us examine those miracles, related in scripture; and not to lose ourselves in too wide a field, let us confine ourselves to such as we find in the *Pentateuch*, which we shall examine, according to the principles of these pretended Christians, not as

You would in vain object to me the difficulty, and almost impossibility of deceiving the world in an affair of such consequence; the wisdom and integrity of that renown'd queen; with the little or no advantage which she could reap from so poor an artifice: All this might astonish me; but I would still reply, that the knavery and folly of men are such common phænomena, that I should rather believe the most extraordinary events to rise from their concurrence than admit so signal a violation of the laws of nature.

But should this miracle be ascrib'd to any new system of religion; men, in all ages, have been so much impos'd on by ridiculous stories of that kind; that this very circumstance would be a full proof of a cheat, and sufficient, with all men of sense, not only to make them reject the fact, but even reject it without farther examination. Tho' the Being to whom the miracle is ascrib'd, be, in this case, Almighty, it does not, upon that account, become a whit more probable; since 'tis impossible for us to know the attributes or actions of such a being, otherwise than from the experience, which we have, of his productions, in the usual course of nature. This still reduces us to past observation, and

as the word or teſtimony of God himſelf, but as the production of a mere human writer and hiſtorian. Here then we are firſt to conſider a book, preſented to us by a barbarous and ignorant people, wrote in an age when they were ſtill more barbarous, and in all probability long after the facts which it relates; corroborated by no concurring teſtimony, and reſembling thoſe fabulous accounts, which every nation gives of its origin. Upon reading this book, we find it full of prodigies and miracles. It gives an account of a ſtate of the world and of human nature entirely different from the preſent: Of our

and obliges us to compare the inſtances of the violations of truth in the teſtimony of men with thoſe of the violation of the laws of nature by miracles, in order to judge which of them is moſt likely and probable. As the violations of truth are more common in the teſtimony concerning religious miracles than in that concerning any other matter of fact; this muſt diminiſh very much the authority of the former teſtimony, and make us form a general reſolution never to lend any attention to it, with whatever ſpecious pretext it may be cover'd.

My Lord *Bacon* ſeems to have embrac'd the ſame principles of reaſoning. *Facienda enim eſt congeries ſive hiſtoria naturalis particularis omnium monſtrorum & partuum naturæ prodigioſorum; omnis denique novitatis & raritatis & inconſueti in natura. Hoc vero faciendum eſt cum ſeveriſſimo delectu, ut conſtet fides. Maxime autem habenda ſunt pro ſuſpectis quæ pendent quomodocunque ex religione, ut prodigia Livii: Nec minus quæ inveniuntur in ſcriptoribus magiæ naturalis, aut etiam alchymiæ, & hujuſmodi hominibus; qui tanquam proci ſunt & amatores fabularum.*

Nov. Organ. Lib. 2. Aph. 29.

fall from that ſtate: Of the age of man, extended to near a thouſand years: Of the deſtruction of the world by a deluge: Of the arbitrary choice of one people, as the favourites of heaven; and that people, the countrymen of the author: Of their deliverance from bondage by prodigies the moſt aſtoniſhing imaginable: I deſire any one to lay his hand upon his heart, and after ſerious conſideration declare, whether he thinks, that the falſhood of ſuch a book, ſupported by ſuch a teſtimony, would be more extraordinary and miraculous than all the miracles it relates; which is, however, neceſſary to make it receiv'd, according to the meaſures of probability above eſtabliſh'd.

What we have ſaid of miracles may be apply'd, without any variation, to prophecies; and indeed, all prophecies are real miracles, and as ſuch only, can be admitted as proofs of any revelation. If it did not exceed the capacity of human nature to foretel future events, it would be abſurd to employ any prophecy as an argument for a divine miſſion or authority from heaven. So that, upon the whole, we may conclude, that the *Chriſtian Religion*, not only was at firſt attended with miracles, but even at this day cannot be believ'd by any reaſonable perſon without one. Mere reaſon is inſufficient to convince us of its veracity:

city: And whoever is mov'd by *Faith* to aſſent to it is conſcious of a continued miracle in his own perſon, which ſubverts all the principles of his underſtanding, and gives him a determination to believe what is moſt contrary to cuſtom and experience.

ESSAY XI.

Of a PARTICULAR PROVIDENCE *and of a* FUTURE STATE.

I WAS lately engag'd in converſation with a friend, who loves ſceptical paradoxes; where, tho' he advanc'd many principles, of which I can by no means approve, yet as they ſeem to be curious, and to bear ſome relation to the chain of reaſoning carry'd on thro' theſe eſſays, I ſhall here copy them from my memory as accurately as I can, in order to ſubmit them to the judgment of the reader.

OUR converſation began with my admiring the ſingular good fortune of philoſophy, which, as it requires intire liberty, above all other privileges, and flouriſhes chiefly from the free oppoſition of ſentiments and argumentation, receiv'd its firſt birth in an age and country of freedom and toleration, and

was never cramp'd, even in its moſt extravagant principles, by any creeds, confeſſions, or penal ſtatutes. For except the baniſhment of *Protagoras*, and the death of *Socrates*, which laſt event proceeded partly from other motives, there are ſcarce any inſtances to be met with, in antient hiſtory, of this bigotted jealouſy and perſecution, with which the preſent age is ſo much infeſted. *Epicurus* liv'd at *Athens* to an advanc'd age, in peace and tranquility: *Epicureans* * were even admitted to receive the ſacerdotal character, and to officiate at the altar, in the moſt ſacred rites of the eſtabliſhed religion: And the public encouragement † of penſions and ſallaries was afforded equally, by the wiſeſt of all the *Roman* emperors ‡, to the profeſſors of every ſect of philoſophy. How requiſite ſuch kind of treatment was to philoſophy, in its firſt origin, will eaſily be conceiv'd, if we reflect, that even at preſent, when it may be ſuppos'd more hardy and robuſt, it bears with much difficulty the inclemency of the ſeaſons, and thoſe harſh winds of calumny and perſecution, which blow upon it.

You admire, ſays my friend, as the ſingular good-fortune of philoſophy, what ſeems to reſult from the natural courſe of things, and to be unavoidable in every age and nation. This pertinacious bigotry,

* Luciani συμπ. ἢ, λαπιθαι. † Id. ισοτιμος.
‡ Id. & Dio.

of

of which you complain, as so fatal to philosophy, is really her offspring, who, after allying with superstition, separates himself intirely from the interest of his parent, and becomes her most inveterate enemy and persecutor. Speculative dogmas and principles of religion, the present occasions of such furious dispute, could not possibly be conceiv'd or admitted in the early ages of the world; when mankind, being wholly illiterate, form'd an idea of religion, more suitable to their weak apprehension, and compos'd their sacred tenets chiefly of such tales and stories as were the objects of traditional belief, more than of argument or disputation. After the first alarm, therefore, was over, which arose from the new paradoxes and principles of the philosophers, these teachers seem, ever after, during the ages of antiquity, to have liv'd in great harmony with the establish'd superstitions, and to have made a fair partition of mankind betwixt them; the former claiming all the learned and the wise, and the latter possessing all the vulgar and illiterate.

It seems then, says I, that you leave politics intirely out of the question, and never suppose, that a wise magistrate can justly be jealous of certain tenets of philosophy, such as those of *Epicurus*, which denying a divine existence, and consequently a providence and a future state, seem to loosen, in a great measure, the

the ties of morality, and may be ſuppos'd, for that reaſon, pernicious to the peace of civil ſociety.

I KNOW, reply'd he, that in fact theſe perſecutions never, in any age, proceeded from calm reaſon, or any experience of the pernicious conſequences of philoſophy; but aroſe intirely from paſſion and prejudice. But what if I ſhould advance farther, and aſſert, that if *Epicurus* had been accus'd before the people, by any of the *ſycophants* or informers of thoſe days, he could eaſily have defended his cauſe, and prov'd his principles of philoſophy to be as ſalutary as thoſe of his adverſaries, who endeavour'd, with ſuch zeal, to expoſe him to the public hatred and jealouſy?

I WISH, ſaid I, you would try your eloquence upon ſo extraordinary a topic, and make a ſpeech for *Epicurus*, which might ſatisfy, not the mob of *Athens*, if you will allow that antient and polite city to have contain'd any mob, but the more philoſophical part of his audience, ſuch as might be ſuppos'd capable of comprehending his arguments.

THE matter would not be difficult, upon ſuch conditions, reply'd he: And if you pleaſe, I ſhall ſuppoſe myſelf *Epicurus* for a moment, and make you ſtand for the *Athenian* people, and ſhall give you ſuch

an harangue as will fill all the urn with white beans, and leave not a black one to gratify the malice of my adverſaries.

VERY well: Pray proceed upon theſe ſuppoſitions.

I COME hither, O ye *Athenians*, to juſtify in your aſſembly what I maintain'd in my ſchool, and find myſelf impeach'd by furious antagoniſts, inſtead of reaſoning with calm and diſpaſſionate enquirers. Your deliberations, which of right ſhould be directed to queſtions of public good and the intereſt of the commonwealth, are diverted to the diſquiſitions of ſpeculative philoſophy; and theſe magnificent, but, perhaps, fruitleſs enquiries, take place of your more familiar but more uſeful occupations. But ſo far as in me lies, I will prevent this abuſe. We ſhall not here diſpute concerning the origin and government of worlds. We ſhall only enquire how far ſuch queſtions concern the public intereſt. And if I can perſuade you, that they are intirely indifferent to the peace of ſociety and ſecurity of government, I hope that you will preſently ſend us back to our ſchools, there to examine at leiſure the queſtion the moſt ſublime, but, at the ſame time, the moſt ſpeculative of all philoſophy.

YOUR

THE religious philoſophers, not ſatisfy'd with the tradition of your forefathers, and doctrines of your prieſts (in which I willingly acquieſce) indulge a raſh curioſity, in trying how far they can eſtabliſh religion upon the principles of reaſon; and they thereby excite, inſtead of ſatisfying the doubts, which naturally ariſe from a diligent and ſcrutinous enquiry. They paint, in the moſt magnificent colours, the order, beauty, and wiſe arrangement of the univerſe; and then aſk, if ſuch a glorious diſplay of intelligence and wiſdom could proceed from the fortuitous concourſe of atoms, or if chance could produce what the higheſt genius can never ſufficiently admire. I ſhall not examine the juſtneſs of this argument. I ſhall allow it to be as ſolid as my antagoniſts and accuſers can deſire. 'Tis ſufficient, if I can prove, from this very reaſoning, that the queſtion is intirely ſpeculative, and that when, in my philoſophical diſquiſitions, I deny a providence and a future ſtate, I undermine not the foundations of ſociety and government, but advance principles, which they themſelves, upon their own topics, if they argue conſiſtently, muſt allow to be ſolid and ſatisfactory.

YOU then, who are my accuſers, have acknowleg'd, that the chief or ſole argument for a divine exiſtence (which I never queſtion'd) is deriv'd from the order of nature; where there appear ſuch marks

of

of intelligence and design, that you think it extravagant to assign for its cause, either chance, or the blind and unguided force of matter. You allow, that this is an argument, drawn from effects to causes. From the order of the work, you infer, that there must have been project and forethought in the workman. If you cannot make out this point, you allow, that your conclusion fails; and you pretend not to establish the conclusion in a greater latitude than the phænomena of nature will justify. These are your concessions. I desire you to mark the consequences.

When we infer any particular cause from an effect, we must proportion the one to the other, and can never be allow'd to ascribe to the cause any qualities, but what are exactly sufficient to produce the effect. A body of ten ounces rais'd in any scale may serve as a proof, that the counter-ballancing weight exceeds ten ounces; but can never afford a reason, that it exceeds a hundred. If the cause, assign'd for any effect, be not sufficient to produce it, we must either reject that cause, or add to it such qualities as will give it a just proportion to the effect. But if we ascribe to it farther qualities, or affirm it capable of producing other effects, we can only indulge the licence of conjecture, and arbitrarily suppose the existence of qualities and energies, without reason or authority.

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THE ſame rule holds, whether the cauſe aſſign'd be brute unconſcious matter or a rational intelligent being. If the cauſe be known only by the effect, we never ought to aſſign to it any qualities, beyond what are preciſely requiſite to produce the effect; nor can we, by any rules of juſt reaſoning, return back from the cauſe, and infer other effects from it, beyond thoſe by which alone it is known to us. No one, merely from the ſight of one of *Zeuxis*'s pictures, could know, that he was alſo a ſtatuary or architect, and was an artiſt no leſs ſkilful in ſtone and marble than in colours. The talents and taſte diſplay'd in the particular work before us; theſe we may ſafely conclude the workman to be poſſeſs'd of. The cauſe muſt be proportion'd to the effect: And if we exactly and preciſely proportion it, we ſhall never find in it any qualities that point farther, or afford an inference concerning any other deſign or performance. Such qualities muſt be ſomewhat beyond what is merely requiſite to produce the effect, which we examine.

ALLOWING, therefore, the gods to be the authors of the exiſtence or order of the univerſe; it follows, that they poſſeſs that preciſe degree of power, intelligences, and benevolence, which appears in their workmanſhip; but nothing farther can ever be prov'd, except

except we call in the aſſiſtance of exaggeration and flattery to ſupply the defects of argument and reaſoning. So far as the traces of any attributes, at preſent, appear, ſo far may we conclude theſe attributes to exiſt. The ſuppoſition of farther attributes is mere hypotheſis; much more, the ſuppoſition, that, in diſtant periods of place and time, there has been, or will be a more magnificent diſplay of theſe attributes, and a ſcheme or order of adminiſtration more ſuitable to ſuch imaginary virtues. We can never be allow'd to mount up from the univerſe, the effect, to *Jupiter*, the cauſe; and then deſcend downwards, to infer any new effect from that cauſe; as if the preſent effects alone were not intirely worthy of the glorious attributes which we aſcribe to that deity. The knowlege of the cauſe being deriv'd ſolely from the effect, they muſt be exactly adjuſted to each other, and the one can never point towards any thing farther, or be the foundation of any new inference and concluſion.

You find certain phænomena in nature. You ſeek a cauſe or author. You imagine that you have found him. You afterwards become ſo enamour'd of this offspring of your brain, that you imagine it impoſſible but he muſt produce ſomething greater and more perfect than the preſent ſcene of things, which is ſo full of ill and diſorder. You forget, that this

ſuperlative intelligence and benevolence are entirely imaginary, or at leaſt, without any foundation in reaſon, and that you have no ground to aſcribe to him any qualities, but what you ſee he has actually exerted and diſplay'd in his productions. Let your gods, therefore, O philoſophers, be ſuited to the preſent appearances of nature: And preſume not to alter theſe appearances by arbitrary ſuppoſitions, in order to ſuit them to the attributes, which you ſo fondly aſcribe to your deities.

When prieſts and poets, ſupported by your authority, O *Athenians*, talk of a golden or a ſilver age, which preceded the preſent ſcene of vice and miſery, I hear them with attention and with reverence. But when philoſophers, who pretend to neglect authority, and to cultivate reaſon, hold the ſame diſcourſe, I pay them not, I own, the ſame obſequious ſubmiſſion and pious deference. I aſk, Who carry'd them into the celeſtial regions, who admitted them into the councils of the gods, who open'd to them the book of fate, that they thus raſhly affirm that their deities have executed, or will execute, any purpoſe, beyond what has actually appear'd? If they tell me, that they have mounted on the ſteps or by the gradual aſcent of reaſon, and by drawing inferences from effects to cauſes, I ſtill inſiſt, that they have aided the aſcent of reaſon by the

wings

wings of imagination; otherwiſe they could not thus change their manner of inference, and argue from cauſes to effects; preſuming, that a more perfect production than the preſent world would be more ſuitable to ſuch perfect beings as the gods, and forgetting, that they have no reaſon to aſcribe to theſe celeſtial beings any perfection or any attribute, but what can be found in the preſent world.

Hence all the fruitleſs induſtry to account for the ill appearances of nature, and ſave the honour of the gods; while we muſt acknowlege the reality of that evil and diſorder, with which the world ſo much abounds. The obſtinate and intractable qualities of matter, we are told, or the obſervance of general laws, or ſome ſuch reaſon is the ſole cauſe, which controul'd the power and benevolence of *Jupiter*, and oblig'd him to create mankind and every ſenſible creature ſo imperfect and ſo unhappy. Theſe attributes, then, are, it ſeems, beforehand, taken for granted, in their greateſt latitude. And upon that ſuppoſition, I own, that ſuch conjectures may, perhaps, be admitted as plauſible ſolutions of the ill phænomena. But ſtill I aſk; Why take theſe attributes for granted, or why aſcribe to the cauſe any qualities but what actually appear in the effect? Why ture your brain to juſtify the courſe of nature upon ſuppoſitions, which, for aught you know, may be en-

tirely imaginary, and of which there are to be found no traces in the courſe of nature?

THE religious hypotheſis, therefore, muſt be conſider'd only as a particular method of accounting for the viſible phænomena of the univerſe: But no juſt reaſoner will ever preſume to infer from it any ſingle fact, and alter or add to the phænomena, in any ſingle particular. If you think, that the appearances of things prove ſuch cauſes, 'tis allowable for you to draw an inference concerning the exiſtence of theſe cauſes. In ſuch complicated and ſublime ſubjects, every one ſhould be indulged in the liberty of conjecture and argument. But here you ought to reſt. If you come backward, and arguing from your infer'd cauſes, conclude, that any other fact has exiſted, or will exiſt, in the courſe of nature, which may ſerve for a fuller diſplay of particular attributes; I muſt admoniſh you, that you have departed from the method of reaſoning, attach'd to the preſent ſubject, and muſt certainly have added ſomething to the attributes of the cauſe, beyond what appears in the effect; otherwiſe you could never, with tolerable ſenſe or propriety, add any thing to the effect, in order to render it more worthy of the cauſe.

WHERE, then, is the odiouſneſs of that doctrine, which I teach in my ſchool, or rather, which I examine

amine in my gardens? Or what do you find in this whole queſtion, wherein the ſecurity of good morals, or the peace and order of ſociety is in the leaſt concern'd?

I DENY a providence, you ſay, and ſupreme governor of the world, who guides the courſe of events, and puniſhes the vicious with infamy, and diſappointment, and rewards the virtuous with honour and ſucceſs, in all their undertakings. But ſurely, I deny not the courſe itſelf of events, which lies open to every one's enquiry and examination. I acknowlege, that, in the preſent order of things, virtue is attended with more peace of mind than vice; and meets with a more favourable reception from the world. I am ſenſible, that, according to the paſt experience of mankind, friendſhip is the chief joy of human life, and moderation the only ſource of tranquility and happineſs. I never ballance betwixt the virtuous and the vicious courſe of life; but am ſenſible, that, to a well-diſpos'd mind, every advantage is on the ſide of the former. And what can you ſay more, allowing all your ſuppoſitions and reaſonings? You tell me, indeed, that this diſpoſition of things proceeds from intelligence and deſign. But whatever it proceeds from, the diſpoſition itſelf, on which depends our happineſs or miſery, and conſequently our conduct and deportment in

in life, is ſtill the ſame. 'Tis ſtill open for me, as well as you, to regulate my behaviour, by my experience of paſt events. And if you affirm, that, while a divine providence is allow'd, and a ſupreme diſtributive juſtice in the univerſe, I ought to expect ſome more particular reward of the good, and puniſhment of the bad, beyond the ordinary courſe of events; I here find the ſame fallacy, which I have before endeavour'd to detect. You perſiſt in imagining, that, if we grant that divine exiſtence, for which you ſo earneſtly contend, you may ſafely infer conſequences from it, and add ſomething to the experienc'd order of nature, by arguing from the attributes, which you aſcribe to your gods. You ſeem not to remember, that all your reaſonings on this ſubject can only be drawn from effects to cauſes; and that every argument, deduc'd from cauſes to effects, muſt of neceſſity be a groſs ſophiſm; ſince it is impoſſible for you to know any thing of the cauſe, but what you have antecedently, not infer'd, but diſcover'd to the full, in the effect.

But what muſt a philoſopher judge of thoſe vain reaſoners, who, inſtead of regarding the preſent ſcene of things, as the ſole object of their contemplation, ſo far reverſe the whole courſe of nature, as to render this life merely a paſſage to ſomething farther; a porch, which leads to a greater, and vaſtly

vaſtly different building; a prologue, which ſerves only to introduce the piece and give it more grace and propriety? Whence, do you think, can ſuch philoſophers derive their idea of the gods? From their own conceit and imagination ſurely. For if they deriv'd it from the preſent phænomena, it would never point to any thing farther, but muſt be exactly adjuſted to them. That the divinity may *poſſibly* poſſeſs attributes, which we have never ſeen exerted; may be govern'd by principles of action, which we cannot diſcover to be ſatisfy'd: All this will freely be allow'd. But ſtill this is mere *poſſibility* and hypotheſis. We never can have reaſon to *infer* any attributes, or any principles of action in him, but ſo far as we know them to have been exerted and ſatisfy'd.

Are there any marks of a diſtributive juſtice in the world? If you anſwer in the affirmative, I conclude, that, ſince juſtice here exerts itſelf, it is ſatisfy'd. If you reply in the negative, I conclude, that you have then no reaſon to aſcribe juſtice to the gods. If you hold a medium betwixt affirmation and negation, by ſaying, that the juſtice of the gods, at preſent, exerts itſelf in part, but not in its full extent; I anſwer, that you have no reaſon to give it any particular extent, but only ſo far as you ſee it, *at preſent*, exert itſelf.

THUS I bring the dispute, O *Athenians*, to a short issue with my antagonists. The course of nature lies open to my contemplation as well as theirs. The experienc'd train of events is the great standard, by which we all regulate our conduct. Nothing else can be appealed to in the field, or in the senate. Nothing else ought ever to be heard of, in the school, or in the closet. In vain, would our limited understandings break thro' those bounds, which are too narrow for our fond imaginations. While we argue from the course of nature, and infer a particular intelligent cause, which first bestow'd, and still preserves order in the universe, we embrace a principle, which is both uncertain and useless. 'Tis uncertain; because the subject lies entirely beyond the reach of human experience. 'Tis useless; because our knowlege of this cause being deriv'd entirely from the course of nature, we can never, according to the rules of just reasoning, return back from the cause with any new inferences, or making additions to the common and experienc'd course of nature, establish any new principles of conduct and behaviour.

I OBSERVE, (says I, finding he had finish'd his harangue) that you neglect not the artifice of the demagogues of old; and as you was pleas'd to make me stand for the people, you insinuate yourself into

my favour, by embracing those principles, to which, you know, I have always express'd a particular attachment. But allowing you to make experience (as indeed I think you ought) the only standard of our judgment concerning this, and all other questions of fact; I doubt not but, from the very same experience, to which you appeal, it may be possible to refute this reasoning, which you have put into the mouth of *Epicurus*. If you saw, for instance, a half-finish'd building surrounded with heaps of brick and stone and mortar, and all the instruments of masonry; could you not *infer* from the effect, that it was a work of design and contrivance? And could you not return again, from this infer'd cause, to infer new additions to the effect, and conclude, that the building would soon be finish'd, and receive all the farther improvements, which art could bestow upon it? If you saw, upon the sea shore, the print of one human foot, you would conclude, that a man had pass'd that way, and that he had also left the traces of the other foot, tho' effac'd by the rolling of the sands or inundation of the waters. Why then do you refuse to admit the same method of reasoning with regard to the order of nature? Consider the world and the present life only as an imperfect building, from which you can infer a superior intelligence; and arguing from that superior intelligence, which can leave nothing imperfect; why may you not infer a more fi-

niſh'd ſcheme or plan, which will receive its completion in ſome diſtant period of ſpace or time? Are not theſe methods of reaſoning exactly parallel? And under what pretext, can you embrace the one, while you reject the other?

THE infinite difference of the ſubjects, reply'd he, is a ſufficient foundation for this difference in my arguments and concluſions. In works of *human* art and contrivance, 'tis allowable to advance from the effect to the cauſe, and returning back from the cauſe, form new inferences concerning the effect, and examine the alterations, which it has probably undergone, or may ſtill undergo. But what is the foundation of this method of reaſoning? Plainly this; that man is a being, whom we know by experience, whoſe motives and deſigns we are acquainted with, and whoſe projects and inclinations have a certain connexion and coherence, according to the laws, which nature has eſtabliſh'd for the government of ſuch a creature. When, therefore, we find, that any work has proceeded from the ſkill and induſtry of man; as we are otherwiſe acquainted with the nature of the animal; we can draw a hundred inferences concerning what may be expected from him; and theſe inferences will all be founded on experience and obſervation. But did we know man only from the ſingle work or production, which we examine,

'twere impoſſible for us to argue in this manner; becauſe our knowlege of all the qualities, which we aſcribe to him, being in that caſe deriv'd from the production, 'tis impoſſible they could point to any thing farther, or be the foundation of any new inferences. The print of a foot in the ſand can only prove, when conſider'd alone, that there was ſome figure adapted to it, by which it was produc'd: But the print of a human foot proves likewiſe, from our other experience, that there was probably another foot, which alſo left its impreſſion, tho' effac'd by time or other accidents. Here we mount from the effect to the cauſe; and deſcending again from the cauſe, infer alterations in the effect; but this is not a continuation of the ſame ſimple chain of reaſoning. We comprehend in this caſe a hundred other experiences and obſervations, concerning the *uſual* figure and members of that ſpecies of animal, without which this method of argument muſt be conſider'd as altogether fallacious and ſophiſtical.

The caſe is not the ſame with our reaſonings from the works of nature. The Deity is known to us only by his productions, and is a ſingle being in the univerſe, not comprehended under any ſpecies or genus, from whoſe experienc'd attributes or qualities, we can, by analogy, infer any attribute or quality in him. As the univerſe ſhews wiſdom and

goodneſs, we infer wiſdom and goodneſs: As it ſhows a particular degree of theſe perfections, we infer a particular degree of them, preciſely adapted to the effect, which we examine. But farther attributes or farther degrees of the ſame attributes, we can never be authoriz'd to infer or ſuppoſe, by any rules of juſt reaſoning. Now without ſome ſuch licence of ſuppoſition, 'tis impoſſible for us to argue from the cauſe, or infer any alteration in the effect, beyond what has immediately fallen under our obſervation. Greater good produc'd by this Being muſt ſtill prove a greater degree of goodneſs: More impartial diſtribution of rewards and puniſhments muſt proceed from a ſuperior regard to juſtice and equity. Every ſuppos'd addition to the works of nature makes an addition to the attributes of the author of nature; and conſequently, being altogether unſupported by any reaſon or argument, can never be admitted but as mere conjecture and hypotheſis.*

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* In general, it may, I think, be eſtabliſh'd as a maxim, that where any cauſe is known only by its particular effects, it muſt be impoſſible to infer any new effects from that cauſe; ſince the qualities, which are requiſite to produce theſe new effects, along with the former, muſt either be different, or ſuperior, or of more extenſive operation, than thoſe which ſimply produc'd the effect, whence alone the cauſe is ſuppos'd to be known to us. We can never, therefore, have any reaſon to ſuppoſe the exiſtence of theſe qualities. To ſay that the new effects proceed only from a continuation of the ſame energy, which is already known from the firſt effects,

THE great ſource of our miſtake in this ſubject, and of the unbounded licence of conjecture, which we indulge, is, that we tacitly conſider ourſelves, as in the place of the ſupreme Being, and conclude, that he will, on every occaſion, obſerve the ſame conduct, which we ourſelves, in his ſituation, would have embrac'd as reaſonable and eligible. But beſides, that the ordinary courſe of nature may convince us, that almoſt every thing is regulated by principles and maxims very different from ours; beſides this, I ſay, it muſt evidently appear contrary to all rule of analogy to reaſon from the intentions and projects of men to thoſe of a being ſo different, and ſo much ſuperior. In human nature, there is a certain experienc'd conſiſtency and coherence of deſigns and inclinations; ſo that when, from any facts, we have diſcover'd one aim or intention of any man, it may often be reaſonable, from experience, to infer another, and draw a long chain of concluſions concerning his paſt or future conduct. But this method of

ſects, will not remove the difficulty. For even granting this to be the caſe, (which can ſeldom be ſuppos'd) the very continuation and exertion of a like energy (for 'tis impoſſible it can be abſolutely the ſame) I ſay, this exertion of a like energy in a different period of ſpace and time is a very arbitrary ſuppoſition, and what there cannot poſſibly be any traces of in the effects, from which all our knowlege of the cauſe is originally deriv'd. Let the *infer'd* cauſe be exactly proportion'd (as it ſhould be) to the known effect; and 'tis impoſſible that it can poſſeſs any qualities, from which new or different effects can be *infer'd*.

reasonings, but what must be of dangerous consequence to the sciences, and even to the state, by paving the way for persecution and oppression in points, where the generality of mankind are more deeply interested and concern'd.

But there occurs to me, (continu'd I) with regard to your main topic, a difficulty, which I shall just propose to you, without insisting on it, lest it lead into reasonings of too nice and delicate a nature. In a word, I much doubt whether it be possible for a cause to be known only by its effect (as you have all along suppos'd) or to be of so singular and particular a nature as to have no parallel and no similarity with any other cause or object, that has ever fallen under our observation. 'Tis only when two *species* of objects are found to be constantly conjoin'd, that we can infer the one from the other; and were an effect presented, which was entirely singular, and could not be comprehended under any known *species*; I do not see, that we could form any conjecture or inference at all concerning its cause. If experience and observation and analogy be, indeed, the only guides which we can reasonably follow in inferences of this nature; both the effect and cause must bear a similarity and resemblance to other effects and causes which we know, and which we have found in many instances, to be conjoin'd with each

other.

other. I leave it to your own reflections to profecute the confequences of this principle. I fhall juft obferve, that as the antagonifts of *Epicurus* always fuppofe the univerfe, an effect quite fingular and unparallel'd, to be the proof of a Deity, a caufe no lefs fingular and unparallel'd; your reafonings, upon that fuppofition, feem, at leaft, to merit our attention. There is, I own fome difficulty, how we can ever return from the caufe to the effect, and reafoning from our ideas of the former, infer any alteration on the latter, or any addition to it.

ESSAY XII.

Of the ACADEMICAL *or* SCEPTICAL PHILOSOPHY.

PART I.

THERE is not a greater number of philoſophical reaſonings, diſplay'd upon any ſubject, than thoſe, which prove the exiſtence of a Deity, and refute the fallacies of *Atheiſts*; and yet the moſt religious philoſophers ſtill diſpute whether any man can be ſo blinded as to be a ſpeculative atheiſt. How ſhall we reconcile theſe contradictions? The knight-errants, who wander'd about to clear the world of dragons and giants, never entertain'd the leaſt doubt concerning the exiſtence of theſe monſters.

THE *Sceptic* is another enemy of religion, who naturally provokes the indignation of all divines and graver

graver philoſophers; tho' 'tis certain, that no one ever met with any ſuch abſurd creature, or convers'd with a man, who had no opinion or principle concerning any ſubject, either of action or ſpeculation. This begets a very natural queſtion; What is meant by a ſceptic? And how far it is poſſible to puſh theſe philoſophical principles of doubt and uncertainty?

THERE is a ſpecies of ſcepticiſm, *antecedent* to all ſtudy and philoſophy, which is much inculcated by *Des Cartes* and others, as a ſovereign preſervative againſt error and precipitate judgment. It recommends an univerſal doubt, not only of all our former opinions and principles, but alſo of our very faculties; of whoſe veracity, ſay they, we muſt aſſure ourſelves, by a chain of reaſoning, deduc'd from ſome original principle, which cannot poſſibly be fallacious or deceitful. But neither is there any ſuch original principle, which has a prerogative above others, that are ſelf-evident and convincing: Or if there were, could we advance a ſtep beyond it but by the uſe of thoſe very faculties, of which we are ſuppos'd to be already diffident. The *Carteſian* doubt, therefore, were it ever poſſible to be attain'd by any human creature (as it plainly is not) would be altogether incurable; and no reaſoning could ever bring us to a ſtate of aſſurance and conviction upon any ſubject.

It must, however, be confess'd, that this species of scepticism, when more moderate, may be understood in a very reasonable sense, and is a necessary preparative to the study of philosophy, by preserving a proper impartiality in our judgments, and weaning our minds from all those prejudices, which we may have imbib'd from education or rash opinion. To begin with clear and self-evident principles, to advance by timorous and sure steps, to review frequently our conclusions, and examine accurately all their consequences; tho' by this means we shall make both a slow and a short progress in our systems; are the only methods, by which we can ever hope to reach truth, and attain a proper stability and certainty in our determinations.

There is another species of scepticism, *consequent* to science and enquiry; where men are suppos'd to have discover'd, either the absolute fallaciousness of their mental faculties, or their unfitness to reach any fix'd determination in all those curious subjects of speculation, about which they are commonly employ'd. Even our very senses are brought into dispute by a certain species of philosophers; and the maxims of common life are subjected to the same doubt as the most profound principles or conclusions of metaphysics and theology. As these paradoxical tenets (if they may be call'd tenets) are to be met

with

with in ſome philoſophers, and the refutation of them in ſeveral, they naturally excite our curioſity, and make us enquire into the arguments, on which they may be founded.

I NEED not inſiſt upon the more trite topics, employ'd by the ſceptics in all ages, againſt the evidence of *ſenſe*; ſuch as thoſe deriv'd from the imperfection and fallacioufneſs of our organs, on numberleſs occaſions; the crooked appearance of an oar in water; the various aſpects of objects, according to their different diſtances; the double images, which ariſe from the preſſing one eye; with many other appearances of the like nature. Theſe ſceptical topics, indeed, are only ſufficient to prove, that the ſenſes alone are not implicitely to be depended on; but that we muſt correct their evidence by reaſon, and by conſiderations, deriv'd from the nature of the medium, the diſtance of the object, and the diſpoſition of the organ, in order to render them, within their ſphere, the proper *criteria* of truth and falſhood. There are other more profound arguments againſt the ſenſes, which admit not of ſo eaſy a ſolution.

IT ſeems evident, that men are carry'd, by a natural inſtinct or prepoſſeſſion, to repoſe faith in their ſenſes; and that, without any reaſoning, or even almoſt before the uſe of reaſon, we always ſuppoſe an exter-

external universe, which depends not on our perception, but would exist, tho' we and every sensible creature were absent or annihilated. Even the animal creation are govern'd by a like opinion, and preserve this belief of external objects, in all their thoughts, designs, and actions.

It seems also evident, that when men follow this blind and powerful instinct of nature, they always suppose the very images, presented by the senses, to be the external objects, and never entertain any suspicion, that the one are nothing but representations of the other. This very table, which we see white, and which we feel hard, is believ'd to exist, independent of our perception, and to be something external to our mind, which perceives it. Our presence bestows not being on it: Our absence annihilates it not. It preserves its existence, uniform and entire, independent of the situation of intelligent beings, who perceive or contemplate it.

But this universal and primary opinion of all men is soon destroy'd by the slightest philosophy, which teaches us, that nothing can ever be present to the mind but an image or perception, and that the senses are only the inlets, thro' which these images are receiv'd, without being ever able to produce any intercourse betwixt the mind and the object. The table,

ble, which we ſee, ſeems to diminiſh as we remove farther from it: But the real table, which exiſts independent of us, ſuffers no alteration: It was, therefore, nothing but its image, which was preſent to the mind. Theſe are the obvious dictates of reaſon; and no man, who reflects, ever doubted, that the exiſtences, which we conſider, when we ſay, *this houſe* and *that tree*, are nothing but perceptions in the mind, and fleeting copies or repreſentations of other exiſtences, which remain uniform and independent.

So far, then, are we neceſſitated by reaſoning to contradict or depart from the primary inſtincts of nature, and embrace a new ſyſtem with regard to the evidence of our ſenſes. But here philoſophy finds itſelf extremely embarraſs'd, when it would juſtify this new ſyſtem, and obviate the cavils and objections of the ſceptics. It can no longer plead the infallible and irreſiſtible inſtinct of nature: For that led us to a quite different ſyſtem, which is acknowleg'd fallible and even erroneous. And to juſtify this pretended philoſophical ſyſtem, by a chain of clear and convincing argument, or even any appearance of argument, exceeds the power of all human capacity.

By what argument can it be prov'd, that the perceptions of the mind muſt be caus'd by external objects,

jects, entirely different from them, tho' resembling them (if that be possible) and could not arise either from the energy of the mind itself, or from the suggestion of some invisible and unknown spirit, or from some other cause still more unknown to us? 'Tis acknowleg'd, that, in fact, many of these perceptions arise not from any thing external, as in dreams, madness, and other diseases. And nothing can be more inexplicable than the manner, in which body should so operate upon mind as ever to convey an image of itself to a substance suppos'd of so different, and even contrary a nature.

'Tis a question of fact, whether the perceptions of the senses be produc'd by external objects, resembling them: How shall this question be determin'd? By experience surely; as all other questions of a like nature. But here experience is, and must be entirely silent. The mind has never any thing present to it but the perceptions, and cannot possibly reach any experience of their connexion with objects. The supposition of such a connexion is, therefore, without any foundation in reasoning.

To have recourse to the veracity of the supreme Being, in order to prove the veracity of our senses, is surely making a very unexpected circuit. If his veracity were at all concern'd in this matter, our

senses

ſenſes would be entirely infallible; becauſe it is not poſſible that he can ever deceive. Not to mention, that if the external world be once call'd in doubt, we ſhall be at a loſs to find arguments, by which we may prove the exiſtence of that Being or any of his attributes.

This is a a topic, therefore, in which the profounder and more philoſophical ſceptics will always triumph, when they endeavour to introduce an univerſal doubt into all ſubjects of human knowlege and enquiry. Do you follow the inſtincts and propenſities of nature, may they ſay, in aſſenting to the veracity of ſenſe? But theſe lead you to believe, that the very perception or ſenſible image is the external object. Do you diſclaim this, in order to embrace a more rational principle, that the perceptions are only repreſentations of ſomething external? You here depart from your natural propenſities and more obvious ſentiments; and yet are not able to ſatisfy your reaſon, which can never find any convincing argument from experience to prove, that the perceptions are connected with any external objects.

There is another ſceptical topic of a like nature, deriv'd from the moſt profound philoſophy; which might merit our attention were it requiſite to dive ſo deep, in order to diſcover arguments and reaſonings,

reasonings, which can serve so little any serious purpose or intention. 'Tis universally allow'd by modern enquirers, that all the sensible qualities of objects, such as hard, soft, hot, cold, white, black, *&c.* are merely secondary, and exist not in the objects themselves, but are perceptions of the mind, without any external archetype or model, which they represent. If this be allow'd, with regard to secondary qualities, it must also follow with regard to the suppos'd primary qualities of extension and solidity; nor can the latter be any more entitled to that denomination than the former. The idea of extension is entirely acquir'd from the senses of sight and feeling; and if all the qualities, perceiv'd by the senses, be in the mind, not in the object, the same conclusion must reach the idea of extension, which is wholly dependent on the sensible ideas or the ideas of secondary qualities. Nothing can save us from this conclusion, but the asserting, that the ideas of those primary qualities are attain'd by *Abstraction*; which, if we examine accurately, we shall find to be unintelligible, and even absurd. An extension, that is neither tangible nor visible, cannot possibly be conceiv'd: And a tangible or visible extension, which is neither hard nor soft, black nor white, is equally beyond the reach of human conception. Let any man try to conceive a triangle in general, which is neither *Isosceles*, nor *Scalenum*, nor has any particular length

nor

nor proportion of ſides; and he will ſoon perceive the abſurdity of all the ſcholaſtic notions with regard to abſtraction and general ideas *.

THUS the firſt philoſophical objection to the evidence of ſenſe or to the opinion of external exiſtence conſiſts in this, that ſuch an opinion, if reſted on natural inſtinct, is contrary to reaſon, and if refer'd to reaſon, is contrary to natural inſtinct, and at the ſame time, carries no rational evidence with it, to convince an impartial enquirer. The ſecond objection goes farther, and repreſents this opinion as contrary to reaſon; at leaſt, if it be a principle of reaſon, that all ſenſible qualities are in the mind, not in the object.

PART II.

IT may ſeem a very extravagant attempt of the ſceptics to deſtroy *reaſon* by argument and ratioci-

* This argument is drawn from Dr. *Berkley*; and indeed moſt of the writings of that very ingenious author form the beſt leſſons of ſcepticiſm, which are to be found either among the antient or modern philoſophers, *Bayle* not excepted. He profeſſes, however, in his title-page (and undoubtedly with great truth) to have compos'd his book againſt the ſceptics as well as againſt the atheiſts and free-thinkers. But that all his arguments, tho' otherwiſe intended, are, in reality, merely ſceptical, appears from this, *that they admit of no anſwer and produce no conviction.* Their only effect is to cauſe that momentary amazement and irreſolution and confuſion, which is the reſult of ſcepticiſm.

nation; yet is this the grand scope of all their enquiries and disputes. They endeavour to find objections, both to our abstract reasonings, and to those which regard matter of fact and existence.

The chief objection against all *abstract* reasonings is deriv'd from the nature of space and time, ideas, which, in common life and to a careless view, are very clear and intelligible, but when they pass thro' the scrutiny of the profound sciences (and they are the chief object of these sciences) afford principles which seem full of absurdity and contradiction. No priestly *dogmas*, invented on purpose to tame and subdue the rebellious reason of mankind, ever shock'd common sense more than the doctrine of the infinite divisibility of extension, with its consequences; as they are pompously display'd by all geometricians and metaphysicians, with a kind of triumph and exultation. A real quantity, infinitely less than any finite quantity, containing quantities, infinitely less than itself, and so on, *in infinitum*; this is an edifice so bold and prodigious, that it is too weighty for any pretended demonstration to support, because it shocks the clearest and most natural principles of human reason *. But what renders the matter more extraordinary,

* Whatever disputes there may be about mathematical points, we must allow that there are physical points; that is, parts of extension, which cannot be divided or lessen'd, either

ordinary, is, that these seemingly absurd opinions are supported by a chain of reasoning, the clearest and most natural; nor is it possible for us to allow the premises, without admitting the consequences. Nothing can be more convincing and satisfactory than all the conclusions concerning the properties of circles and triangles; and yet, when these are once receiv'd, how can we deny, that the angle of contact betwixt a circle and its tangent is infinitely less than any rectilineal angle, that as you may encrease the diameter of the circle *in infinitum*, this angle of contact becomes still less, even *in infinitum*, and that the angle of contact betwixt other curves and their tangents may be infinitely less than those betwixt any circle and its tangent, and so on, *in infinitum?* The demonstration of these principles seems as unexceptionable as that which proves the three angles of a triangle to be equal to two right ones; tho' the latter opinion be natural and easy, and the former big with contradiction and absurdity. Reason here seems to be thrown into a kind of amazement and suspence, which, without the suggestions of any sceptic, gives her a diffidence of herself, and of the

either by the eye or imagination. These images, then, which are present to the fancy or senses, are absolutely indivisible, and consequently must be allow'd by mathematicians to be infinitely less than any real part of extension; and yet nothing appears more certain to reason, than that an infinite number of them composes an infinite extension. How much more an infinite number of those infinitely small parts of extension, which are still suppos'd infinitely divisible?

ground

ground on which he treads. She sees a full light, which illuminates certain places; but that light borders upon the most profound darkness. And betwixt these she is so dazzled and confounded, that she scarce can pronounce with certainty and assurance concerning any one object.

The absurdity of these bold determinations of the abstract sciences seems to become, if possible, still more palpable with regard to time than extension. An infinite number of real parts of time, passing in succession, and exhausted one after another, appears so evident a contradiction, that no man, one should think, whose judgment is not corrupted, instead of being improv'd, by the sciences, would ever be able to admit of it.

Yet still reason must remain restless and unquiet, even with regard to that scepticism, to which she is led by these seeming absurdities and contradictions. How any clear, distinct idea can contain circumstances, contradictory to itself, or to any other clear, distinct idea, is absolutely incomprehensible; and is, perhaps, as absurd as any proposition, which can be form'd. So that nothing can be more sceptical, or more full of doubt and hesitation, than this scepticism itself, which arises from some of the paradoxical

conclusions of geometry or the science of quantity *.

The sceptical objections to *moral* evidence or to the reasonings concerning matter of fact are either *popular* or *philosophical*. The popular objections are deriv'd from the natural weakness of human understanding; the contradictory opinions, which have been entertain'd in different ages and nations; the variations of our judgment in sickness and health, youth and old age, prosperity and adversity; the perpetual contradiction of each particular man's opinions and sentiments; with many other topics of

* It seems to me not impossible to avoid these absurdities and contradictions, if it be admitted, that there is no such thing as abstract or general ideas, properly speaking; but that all general ideas are, in reality, particular ones, attach'd to a general term, which recalls, upon occasion, other particular ones, that resemble, in certain circumstances, the idea, present to the mind. Thus when the term, Horse, is pronounc'd, we immediately figure to ourselves the idea of a black or a white animal of a particular size or figure: But as that term is also us'd to be apply'd to animals of other colours, figures and sizes, these ideas, tho' not actually present to the imagination, are easily recall'd, and our reasoning and conclusion proceed in the same way, as if they were actually present. If this be admitted (as seems reasonable) it follows that all the ideas of quantity, upon which mathematicians reason, are nothing but particular, and such as are suggested by the senses and imagination, and consequently, cannot be infinitely divisible. 'Tis sufficient to have dropt this hint at present, without prosecuting it any farther. It certainly concerns all lovers of science not to expose themselves to the ridicule and contempt of the ignorant by their conclusions; and this seems the readiest solution of these difficulties.

that kind. 'Tis needless to insist farther on this head. These objections are but weak. For as, in common life, we reason every moment concerning fact and existence, and cannot possibly subsist, without continually employing this species of argument, any popular objections, deriv'd from thence, must be insufficient to destroy that evidence. The great subverter of *Pyrrhonism*, or the excessive principles of scepticism, is action, and employment, and the occupations of common life. These principles may flourish and triumph in the schools; where it is, indeed, difficult, if not impossible to refute them. But as soon as they leave the shade, and by the presence of the real objects, which actuate our passions and sentiments, are put in opposition to the more powerful principles of our nature, they vanish like smoak, and leave the most determin'd sceptic in the same condition as other mortals.

The sceptic, therefore, had better keep in his proper sphere, and display those *philosophical* objections, which arise from more profound researches. Here he seems to have ample matter of triumph; while he justly insists, that all our evidence for any matter of fact, which lies beyond the testimony of sense or memory, is deriv'd entirely from the relation of cause and effect; that we have no other idea of this relation than that of two objects, which have

been frequently *conjoin'd* together; that we have no arguments to convince us, that objects, which have, in our experience, been frequently conjoin'd, will likewise, in other instances, be conjoin'd in the same manner; and that nothing leads us to this inference but custom or a certain instinct of our nature; which it is indeed difficult to resist, but which, like other instincts, may be fallacious and deceitful. While the sceptic insists upon these topics, he shews his force, or rather, indeed, his own and our weakness; and seems, for the time at least, to destroy all assurance and conviction. These arguments might be display'd at greater length, if any durable good or benefit to society could ever be expected to result from them.

For here is the chief and most confounding objection to *excessive* scepticism, that no durable good can ever result from it; while it remains in its full force and vigour. We need only ask such a sceptic, *What his meaning is? And what he proposes by all these curious researches?* He is immediately at a loss, and knows not what to answer. A *Copernican* or *Ptolemaic*, who supports each his different system of astronomy, may hope to produce a conviction, which will remain, constant and durable, with his audience. A *Stoic* or *Epicurean* displays principles, which may not only be durable, but which have a mighty effect on conduct and behaviour. But a *Pyrrhonian* cannot propose,

propose, that his philosophy will have any constant influence on the mind: Or if it had, that its influence would be beneficial to society. On the contrary, he must acknowlege, if he will acknowlege any thing, that all human life must perish, were his principles universally and steadily to prevail. All discourse, all action wou'd immediately cease; and men remain in a total lethargy, till the necessities of nature, unsatisfy'd, put an end to their miserable existence. 'Tis true; so fatal an event is very little to be dreaded. Nature is always too strong for principle. And tho' a *Pyrrhonian* may throw himself or others into a momentary amazement and confusion by his profound reasonings; the first and most trivial event in life will put to flight all his doubts and scruples, and leave him the same, in every point of action and speculation, with the philosophers of every other sect, or with those who never concern'd themselves in any philosophical researches. When he awakes from his dream, he will be the first to join in the laugh against himself, and to confess, that all his objections are mere amusements, and can have no other tendency than to show the whimsical condition of mankind, who must act and reason and believe; tho' they are not able, by their most diligent enquiry, to satisfy themselves concerning the foundation of these operations, or to remove the objections, which may be rais'd against them.

PART III.

There is, indeed, a more *mitigated* ſcepticiſm or *academical* philoſophy, which may be both durable and uſeful, and which may, in part, be the reſult of this *Pyrrhoniſm*, or *exceſſive* ſcepticiſm, when its undiſtinguiſh'd doubts are, in ſome meaſure, corrected by common ſenſe and reflection. The greateſt part of mankind are naturally apt to be affirmative and dogmatical in their opinions; and while they ſee objects only on one ſide, and have no idea of any counterpoizing arguments, they throw themſelves precipitately into the principles, to which they are inclin'd; nor have they any indulgence for thoſe who entertain oppoſite ſentiments. To heſitate or balance perplexes their underſtanding, checks their paſſion, and ſuſpends their actions. They are, therefore, impatient till they eſcape from a ſtate, which to them is ſo uneaſy; and they think, that they can never remove themſelves far enough from it, by the violence of their affirmations and obſtinacy of their belief. But could ſuch dogmatical reaſoners become ſenſible of the ſtrange infirmities of human underſtanding, even in its moſt perfect ſtate, and when moſt accurate and cautious in its determinations; ſuch a reflection would naturally inſpire them with more modeſty and reſerve, and diminiſh their fond opinion of themſelves, and their prejudice againſt antagoniſts. The illiterate

illiterate may reflect on the disposition of the learned, who, amidst all the advantages of study and reflection, are commonly still modest and reserv'd in their determinations: And if any of the learned are inclin'd, from their natural temper, to haughtiness and obstinacy, a small tincture of *Pyrrhonism* may abate their pride, by showing them, that the few advantages, which they may have attain'd over their fellows, are but inconsiderable, if compar'd with the universal perplexity and confusion, which is inherent in human nature. In general, there is a degree of doubt, and caution, and modesty, which, in all kinds of scrutiny and decision, ought for ever to accompany a just reasoner.

ANOTHER species of *mitigated* scepticism, which may be of advantage to mankind, and which may be the natural result of the *Pyrrhonian* doubts and scruples, is the limitation of our enquiries to such subjects as are best adapted to the narrow capacity of human understanding. The *imagination* of man is naturally sublime, delighted with whatever is remote and extraordinary, and running, without controul, into the most distant parts of space and time, in order to avoid the objects, which custom has render'd too familiar to it. A correct *Judgment* observes a contrary method; and avoiding all distant and high enquiries, confines itself to common life, and to such subjects

ſubjects as fall under daily practice and experience; leaving the more ſublime topics to the embelliſhment of poets and orators, or to the arts of prieſts and politicians. To bring us to ſo ſalutary a determination, nothing can be more ſerviceable, than to be once thoroughly convinc'd of the force of the *Pyrrhonian* doubt, and of the impoſſibility of any thing, but the ſtrong power of natural inſtinct, to free us from it. Thoſe who have a propenſity to philoſophy, will ſtill continue their reſearches; becauſe they reflect, that, beſides the immediate pleaſure, attending ſuch an occupation, philoſophical deciſions are nothing but the reflections of common life, methodiz'd and corrected. But they will never be tempted to go beyond common life, ſo long as they conſider the imperfection of thoſe faculties which they employ, their narrow reach, and their inaccurate operations. While we cannot give a ſatisfactory reaſon, why we believe after a thouſand experiments, that a ſtone will fall, or fire burn; can we ever ſatisfy ourſelves concerning any determinations which we may form with regard to the origin of worlds, and the ſituation of nature, from, and to eternity?

This narrow limitation, indeed, of our enquiries, is, in every reſpect, ſo reaſonable, that it ſuffices to make the ſlighteſt examination into the natural powers of the human mind, and compare them to their ob-

jects, in order to recommend it to us. We shall then find what are the proper subjects of science and enquiry.

It seems to me, that the only objects of the abstract sciences or of demonstration are quantity and number, and that all attempts to extend this more perfect species of knowlege beyond these bounds are mere sophistry and illusion. As the component parts of quantity and number are entirely similar, their relations become intricate and involv'd; and nothing can be more curious, as well as useful, than to trace, by a variety of mediums, their equality or inequality, thro' their different appearances. But as all other ideas are clearly distinct and different from each other, we can never advance farther, by all our scrutiny, than to observe this diversity, and, by an obvious reflection, pronounce one thing not to be another. Or if there be any difficulty in these decisions, it proceeds entirely from the undetermin'd meaning of words, which is corrected by juster definitions. That *the square of the Hypotenuse is equal to the squares of the other two sides*, cannot be known, let the terms be ever so exactly defin'd, without a train of reasoning and enquiry. But to convince us of this proposition, *that where there is no property, there can be no injustice*, 'tis only necessary to define the terms, and explain injustice to be a violation of property. This proposition is, indeed, nothing but a more imperfect

definition. 'Tis the same case with all those pretended syllogistical reasonings, which may be found in every other branch of learning, except the sciences of quantity and number; and these may safely, I think, be pronounc'd the only proper objects of knowledge and demonstration.

All other enquiries of men regard only matter of fact and existence; and these are evidently incapable of demonstration. Whatever *is* may *not be*. No negation of a fact can involve a contradiction. The non-existence of any being, without exception, is as clear and distinct an idea as its existence. The proposition, which affirms it not to be, however false, is no less conceivable and intelligible, than that which affirms it to be. The case is different with the sciences, properly so call'd. Every proposition, which is not true, is there confus'd and unintelligible. That the cube root of 64 is equal to the half of 10, is a false proposition, and can never be distinctly conceiv'd. But that *Cæsar*, or the angel *Gabriel*, or any being never existed, may be a false proposition, but still is perfectly conceivable, and implies no contradiction.

The existence, therefore, of any being can only be prov'd by arguments from its cause or its effect, and these arguments are founded entirely on experience. If we reason *à priori*, any thing may

able to produce any thing. The falling of a peeble may, for aught we know, extinguish the sun; or the wish of a man controul the planets in their orbits. 'Tis only experience, which teaches us the nature and bounds of cause and effect, and enables us to infer the existence of one object from that of another. Such is the foundation of moral reasoning, which forms the greatest part of human knowledge, and is the source of all human action and behaviour.

MORAL reasonings are either concerning particular or general facts. All deliberations in life regarding former; as also all disquisitions in history, chronology, geography, and astronomy.

THE sciences, which treat of general facts, are politics, natural philosophy, physic, chymistry, &c. where the qualities, causes, and effects of a whole species of objects are enquir'd into.

DIVINITY or Theology, as it proves the existence of a Deity, and the immortality of souls, is composed partly of reasoning [illegible] particular, partly concerning general [illegible] tion.

* That impious maxim [illegible] *Ito, sistat fit*, by which [illegible] seems to be a maxim [illegible] only the will of the [illegible] for aught we know [illegible] might create it, or an [illegible] imagination can [illegible]

in *reason*, so far as it is supported by experience. But its best and most solid foundation is *faith* and divine revelation.

MORALS and criticism are not so properly objects of the understanding as of taste and sentiment. Beauty, whether moral or natural, is felt, more properly than perceiv'd. Or if we reason concerning it, and endeavour to fix its standard, we regard a new fact, *viz.* the general taste of mankind, or some such fact, which may be the object of reasoning and enquiry.

WHEN we run over libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasonings concerning quantity or number?* No. *Does it contain any experimental reasonings concerning matters of fact or existence?* No. Commit it then to the flames: For it can contain nothing but sophistry and illusion.

FINIS.

ERRATA.

PAGE 173. l. 20. for *on* read *in*. P. 187. l. 22. read *persons*. P. 188. l. 4. read *as related*. P. 189. l. 21. read *face of it*.